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<p>(54) Title: CRYSTAL OF A LYMPHOCYTE KINASE-LIGAND COMPLEX AND METHODS OF USE (57) Abstract  The invention relates to the three-dimensional structure of a crystal of a kinase enzyme complexed with a ligand. The three-dimensional structure of a protein kinase-ligand complex is disclosed. The invention also relates to methods of preparing such crystals. Kinase-ligand crystal structures wherein the ligand is an inhibitor molecule are useful for providing structure information that may be integrated into drug screening and drug design processes. Thus, the invention also relates to methods of using the crystal structure of kinase enzyme-ligand complexes for identifying, designing, selecting, or testing inhibitors of kinase enzymes, such inhibitors being useful as therapeutics for the treatment or modulation of (i) diseases; (ii) disease symptoms; or (iii) the effect of other physiological events mediated by kinases; having one or more kinase enzymes involved in their pathology.</p>		

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## CRISTAL OF A LYMPHOCYTE KINASE-LIGAND COMPLEX AND METHODS OF USE

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This application claims priority benefit under Title 35 USC §119(e) of United States Provisional Application No. 60/134,965, filed May 19, 1999 and entitled *Crystal of a Kinase-Ligand Complex and Methods of Use*, the entire contents of which are incorporated herein by reference.

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### Background of the Invention

The invention relates to the three-dimensional structure of a crystal of a kinase enzyme complexed with a ligand. The three-dimensional structure of a protein kinase-ligand complex is disclosed. The invention also relates to methods of preparing such crystals. Kinase-ligand crystal structures wherein the ligand is an inhibitor molecule are useful for providing structural information that may be integrated into drug screening and drug design processes. Thus, the invention also relates to methods of using the crystal structure of kinase enzyme-ligand complexes for identifying, designing, selecting, or testing inhibitors of kinase enzymes, such inhibitors being useful as therapeutics for the treatment or modulation of i) diseases; ii) disease symptoms; or iii) the effect of other physiological events mediated by kinases; having one or more kinase enzymes involved in their pathology.

T-cell activation is a complex process that results from the integrated activation of multiple signal transduction pathways [1-3]. One of the earliest T-cell signaling events observed upon T-cell receptor (TCR)-ligand engagement is the CD4/CD8-dependent activation of lymphocyte kinase (Lck), a member of the non-receptor Src family of tyrosine kinases [4-8]. Lck phosphorylates and activates a number of substrates necessary for TCR signaling [9]. Perhaps the best understood activity of Lck is the phosphorylation of immunoreceptor tyrosine-based activation motifs (ITAMs) in the TCR  $\zeta$ -subunit [4, 6, 9]. The extent of  $\zeta$ -chain ITAM phosphorylation dictates the threshold for ligand-mediated TCR signaling and T-cell activation [10, 11]. Phosphorylated ITAMs serve as high affinity docking sites for the recruitment of additional signaling factors, particularly the Syk family tyrosine kinase ZAP-70 [12, 13]. Dual phosphorylation of tyrosines in the ITAMs by Lck is required

for the binding of tandem ZAP-70 Src homology-2 (SH2) domains [14-16]. Co-localization of ZAP-70 and Lck to the TCR- $\zeta$  subunit-CD4/8 complex facilitates the Lck-mediated activation of ZAP-70 and subsequent ZAP-70 autophosphorylation [17-21]. Activated Lck and ZAP-70 perpetuate the TCR signaling cascade by providing  
5 additional docking sites for other SH2 containing kinases (including Fyn, Syk and Itk), adaptor proteins (including SLP-76, SHC, LAT, Fyb and Grap), and transducing elements (including PLC $\gamma$ , PI3-kinase and Rac/Rho) [2, 3, 22]. Biochemical information is then transmitted down multiple signaling pathways, including the Ras/mitogen-activated protein kinase pathway, the phosphatidylinositol pathway, and  
10 the Rho/Rac pathway [2]. Among other effects, TCR signaling up-regulates transcription and translation of IL-2 and IL-2 receptors which are prerequisites for T-cell proliferation.

Genetic studies have demonstrated that Lck expression is restricted to lymphocytes. Loss of Lck expression in human Jurkat T-cells results in a loss of  
15 signaling in response to TCR ligation [23, 24]. In addition, inactivation of the Lck gene, or expression of dominant negative transgenes in mice, results in early arrest of thymocyte maturation [25-27]. These and other biochemical studies have implicated Lck as an essential early mediator of the TCR signaling pathway. Lck therefore represents an attractive target for therapeutic intervention in T-cell mediated disorders  
20 such as autoimmune diseases and transplant rejection.

Lck is a modular protein consisting of a C-terminal catalytic domain, a single Src homology-2 (SH2) and a Src homology-3 (SH3) domain, and a unique N-terminal region. The N-terminal region is involved in anchoring Lck to CD4/8 through Zn<sup>2+</sup> coordination with conserved cysteine residues present in both proteins [28, 29]. The  
25 activity of Lck is regulated by autophosphorylation of Tyr-394 located in the catalytic domain activation loop [30] and by the phosphorylation of Tyr-505 by C-terminal Src kinase (Csk) [31-33]. Further understanding of the regulation of Lck has been provided by the crystal structures of two other Src family protein kinases, c-Src and Hck [34-36]. From these structures it can be delineated that the SH2 and SH3  
30 domains function in part to negatively regulate Lck activity by forming intramolecular contacts that stabilize the catalytic domain in an inactive conformation [37]. The SH2 domain binds to phosphorylated Tyr-505 and the SH3 domain associates with a



proline containing motif in a hinge region connecting the SH2 and catalytic domains [34-36]. Release of these intramolecular regulatory constraints by dephosphorylation of Tyr-505 [38] and/or the presence of competing SH3/SH2 ligands [39] results in the autophosphorylation of Tyr-394 in the activation loop and a catalytically active kinase [19]. A structural basis for Lck activation has been previously elucidated from the crystal structure of an autophosphorylated Lck catalytic domain [40].

Protein kinases have been implicated as potential targets for a variety of clinical applications. The identification of molecules, such as inhibitors, that bind to kinase enzymes, affect kinase activity and thereby influence pathological processes, is valuable for investigating potential therapeutics for disease, or disease symptoms, that are mediated by kinase enzymes. Such identification has been attempted using methods such as the screening of large numbers of random libraries of natural and/or synthetic compounds, hoping that some number of random compounds will demonstrate the desired biological activity. This method is inefficient in that it typically results in a small number of "hits" and it is constrained by the limitations imposed in actually screening large numbers of compounds in laboratory assays. An improved method of such identification is structure-based drug design ("SBDD"). SBDD comprises a number of integrated components, including, structural information (e.g., spectroscopic data such as X-ray or magnetic resonance information, relating to enzyme structure and/or conformation, enzyme-ligand interactions, etc.), computer modeling, medicinal chemistry, and biological testing (both *in vitro* and *in vivo*). These components, each alone and in combination, are useful for accelerating the drug discovery process, for gaining insight into disease and disease processes, and for providing a more efficient method for identifying drug candidates.

Efforts to understand the molecular constraints necessary to achieve inhibitor potency and selectivity have been aided by an increasing number of crystal structures of different protein kinases complexed with ATP-competitive inhibitors. One such inhibitor is staurosporine, an alkaloid that has been previously shown to inhibit a broad range of tyrosine and serine/threonine kinases with nanomolar potency [41]. Crystal structures of staurosporine bound to the serine/threonine kinases protein kinase A (PKA) and the cyclin-dependent kinase 2 (CDK2) elucidated the binding

mode of this inhibitor to protein kinases [42, 43] (reviewed in [44]). A similar binding mode has been reported in a recently solved structure of the tyrosine kinase Csk in complex with staurosporine [45]. Described herein are crystal structures of Lck complexed with staurosporine obtained from both soaking and co-crystallization experiments. Comparison of these two complexes and those previously reported further elucidates the structural basis for the high potency and poor selectivity of this inhibitor.

To date, the three-dimensional structures of Hck/AMP-PNP and Hck/Quercetin complexes have been reported, however, these ligands are not src-selective ligands. The three-dimensional structure of c-Src (apo form) has been elucidated, however, this structure lacks a ligand bound to the enzyme and therefore lacks critical information regarding the interaction of a ligand with the active site of the enzyme.

The role of Src family members Lck and Fyn in TCR activation has been studied with two related Src kinase inhibitors, PP1 and PP2 [51]. PP1 and PP2 are reported to selectively inhibit Lck and c-Src *in vitro* at concentrations much lower than is required to inhibit Zap-70, JAK2, EGF-R kinase and protein kinase A [51]. These compounds also inhibit anti-CD3-induced protein tyrosine phosphorylation and subsequent IL-2 gene activation in T lymphocytes [51]. Thus, it appears that PP1 and PP2 dissect a component of TCR signaling not distinguished by other immunosuppressive drugs such as cyclosporin and FK-506. The structural basis for the potency and selectivity of these compounds with the crystal structure of PP2 bound to Lck is described herein. This structure is a useful tool in the design of specific Lck inhibitors and aids in the tailoring of inhibitors, such as PP1 and PP2, to enhance their physical properties, including their therapeutic and pharmacokinetic properties.

There is a need for three-dimensional structures of kinase-ligand complexes in order to garner a better understanding of the important interactions between a kinase and its bound ligand, and to utilize this information for methods to identify, design and test molecules with improved binding affinity and molecules that would be useful as therapeutics and/or modulators of kinase-mediated physiological events.

### Summary of the Invention

The present invention provides crystals of kinase-ligand complexes suitable for X-ray diffraction analysis. The invention also relates to methods for preparing the crystals of kinase-ligand complexes, particularly where the ligand is an inhibitor of the kinase enzyme. The invention also relates to the detailed three-dimensional structural information of the protein-ligand complexes constituting these crystals, and use of the structure coordinates to reveal atomic details of the active site(s) and other physicochemical interactions that enhance interaction and/or association between the kinase and the ligand. It is also an object of this invention to use the kinase-ligand complex crystals, the three-dimensional structural information provided by the kinase-ligand complex crystals, and the structure coordinates of the kinase-ligand complex in methods to identify, design, select, and evaluate potential inhibitors of kinases that would be useful as therapeutics for diseases or symptoms of diseases that are associated with kinase-mediated physiological events. Such methods may also include use of computer modeling of potential inhibitors based on the the kinase-ligand complex crystals, the three-dimensional structural information of the kinase-ligand complex crystals, and the structure coordinates of the kinase-ligand complex crystals.

### Brief Description of the Drawings

Figure 1. Electron density maps of ligands bound to Lck. 2Fo-Fc electron density maps contoured at  $1\sigma$ . The linker region between the N and C terminal lobe of the Lck kinase domain is shown on the left side of the bound ligands. Hydrogen bonds formed between ligands and the kinase linker region are represented by the purple dashed lines. A. AMP-PNP; B. staurosporine; C. PP2.

Figure 2. Schematic representation of the hydrogen bonding interactions and van der Waals contacts between Lck and the ligands. Hydrogen bonds are represented with dashed lines. The residues of Lck in contact with the bound ligand are shown. A and C. AMP-PNP; B and D. staurosporine; E and F. PP2.

Figure 3. Interactions of staurosporine and PP2 with Lck at the ATP binding cleft. The residues of Lck in contact with the bound ligands are shown in A , B and C. Surface curvature of Lck when bound to ligands is shown in D, E and F. The most convex parts of the molecular surface are coded green while the most concave and planar are coded gray and white, respectively. A & E. staurosporine; C & F. PP2. B and D. AMP-PNP.

Figure 4. Superposition of Lck (green), CDK2 (cyan) and PKA (yellow) in complex with staurosporine (purple). The structure alignment is based on the bound ligands. The Lck:staurosporine co-crystallized complex contains a loop conformation intermediate between the more open and closed positions observed in the CDK2 and PKA complexes.

Figure 5. Structure based sequence alignment of Lck, ZAP-70, the EGF receptor, and PKA. The conserved residues are highlighted in yellow. The amino acids in the hydrophobic pocket where PP2 binds are highlighted in black. Tyrosine 394 on the activation loop is highlighted in purple. The kinase lobe linker region and the catalytic region are labeled.

Figure 6. Comparison of the ligand positions in the Lck complexes based on the superposition of the COs of Lck. A. AMP-PNP (purple) and staurosporine. B. AMP-PNP (purple) and PP2.

Figure 7. A. Enzymatic assay. IC<sub>50</sub> titration curves for an Lck catalytic domain (squares) or the nearly full-length enzyme with SH2 and SH3 regulatory domains (circles). The Lck proteins were titrated with staurosporine (open symbols) and PP2 (filled symbols). B. Cellular assay. PP2 (filled diamonds) and staurosporine (filled triangles) inhibit TCR-induced IL-2 secretion from hPBL T-cells. C. Endogenous protein phosphorylation assay. PP2 and staurosporine inhibit TCR-induced increases in phosphotyrosine incorporation into the TCR p23  $\zeta$ -chain and a 70 kDa protein.

### Detailed Description of the Invention

In order that the invention described herein be more fully understood, the following detailed description is set forth. The interactions of a ligand (e.g., inhibitors AMP-PNP, staurosporine, and PP2) with a kinase are delineated below. For an  
5 overview of kinases, see, *The Protein Kinase Facts Book I & II*, G. Hardie and S. Hanks, eds., Academic Press, (1995).

#### AMP-PNP binding to the Lck catalytic domain

To provide a structural basis for understanding the interactions of  
10 ATP-competitive inhibitors with Lck, the Lck catalytic domain was co-crystallized with the non-hydrolyzable ATP analog AMP-PNP. Consistent with structures of other protein kinases in complex with ATP analogs [46-48], AMP-PNP binds in the cleft between the N- and C-terminal lobes of Lck, with a pair of conserved hydrogen bonds formed between the adenine base and the backbone of the kinase linker region  
15 (Figure 1A & 2A). The gamma phosphate of AMP-PNP is disordered in the binary complex, perhaps due to the absence of a substrate peptide or divalent cations. In ternary complexes of PKA with ATP and a substrate peptide inhibitor [46, 47], and IRK with AMP-PNP and a substrate peptide [48], the bound peptides appear to help anchor the gamma phosphate of ATP to the enzyme. Only small conformational  
20 changes are observed in the Lck:AMP-PNP complex relative to the previously reported apo Lck structure [40]. However, Ser323 undergoes a conformational change in the ribose binding pocket of Lck that appears to be important for AMP-PNP binding. In the apo structure, Ser323 adopts two partially occupied conformations. One conformation results in a hydrogen bond between Ser323 and Asp326. The other  
25 conformation results in Ser323 hydrogen bonding to the backbone carbonyl of Asp368. In both conformations, the Ser323 O $\gamma$  points away from the ATP binding cleft and faces the C-terminal lobe. In the Lck:AMP-PNP structure, the side chain of Ser323 is rotated more than 100 degrees about  $\chi_1$  and forms a hydrogen bond with the ribose oxygen of AMP-PNP (O $\gamma$ :O2' distance 2.7 Å). Ser323 of Lck is conserved  
30 among all known Src-family tyrosine kinases with the exception of Blk, which contains a cysteine at this position.

### Staurosporine binding to Lck

Structures of staurosporine bound to Lck were determined both from apo Lck crystals soaked with. In the Lck:staurosporine complex the inhibitor occupies the ATP binding site and forms three hydrogen bonds with the enzyme. The NH and keto oxygen of the lactam ring of staurosporine make a pair of hydrogen bonds with the carbonyl oxygen of Glu317 and the backbone NH of Met319, similar to those formed by the adenine ring of ATP (Figure 1B and 2B). The third hydrogen bond, which occurs in the ribose binding pocket of Lck, appears to be different in the two complexes. In the Lck:staurosporine complex derived from soaking, the methylamino substituent of the glycosidic ring participates in a hydrogen bond with Ser323 (N:O $\gamma$  distance 2.9 Å). This interaction is similar to the hydrogen bond observed between Ser323 and the ribose 2'-hydroxyl in the Lck:AMP-PNP complex.

Staurosporine also makes extensive van der Waals contacts with Lck. Seven residues from the N-terminal lobe (Leu251, Gly252, Val259, Ala271, Lys273, Thr316, and Tyr318) and six residues from the C-terminal lobe (Met319, Gly322, Ser323, Ala368, Leu371, and Asp382) of Lck contribute a total of 78 van der Waals contacts to the bound inhibitor. The majority of these contacts are to the fused carbazole moiety of staurosporine, which spans a plane of approximately 15x11 Å<sup>2</sup>. In contrast, the glycosidic group of staurosporine spans only 6 Å in a direction perpendicular to the plane of carbazole ring system. Approximately half of the van der Waals interactions result from a large movement of the glycine rich loop of Lck, induced by staurosporine binding.

Crystal structures of the protein kinases CDK2, PKA and CSK in complex with staurosporine have also been reported [42, 43, 45]. The same hydrogen bonding pattern observed between the lactam of staurosporine and the linker region of Lck is observed in each of these crystal structures. Inspection of the PKA:staurosporine and CDK2:staurosporine complexes (CSK coordinates not available) reveals that the CH-O interaction described above for our two Lck:staurosporine structures is present as the closest contact between staurosporine and the glycine rich loop in these structures as well. Not only are the CH-O distances constant in the four complexes (3.5 Å), but the geometry of the interaction is similar as well. This type of CH-O interaction is well documented in small molecule crystal

structures [49] and has also been observed in other biomolecular complexes [50]. Interestingly, both PKA and CDK2 undergo conformational changes in the glycine rich loop upon staurosporine binding, and while this loop contains additional conformational differences in the CDK2 complex (Figure 4), the glycine  
5 C $\alpha$ :glycosidic oxygen interaction is maintained. This emphasizes the importance of this interaction in complexes between staurosporine and Ser/Thr and tyrosine kinases. It appears that this interaction is critical for the potency of staurosporine binding to the ATP binding site of these kinases.

In both the Lck and CSK complexes a single hydrogen bond is formed  
10 between staurosporine and the ribose binding pocket [45]. In comparison, staurosporine has been observed to form two hydrogen bonds with this pocket in CDK2 and PKA [42, 43]. In these two complexes rotation about the C-N bond of the methylamino substituent allows the amine nitrogen to hydrogen bond to both a carbonyl oxygen from the catalytic loop and a side chain from the ribose binding  
15 pocket. Of the two methylamino hydrogen bonding interactions observed in our Lck:staurosporine complex, the contact with the carbonyl oxygen of Ala368 more closely resembles the interactions observed in the PKA and CDK2 complexes. The distance between this carbonyl oxygen and the C $\alpha$  of Gly252 is 10.3 Å for the Lck:staurosporine complex. The equivalent distances in the PKA and CDK2  
20 structures are 9.0 Å and 8.8 Å, respectively.

#### PP2 binding to Lck

PP2 has been reported to be a potent Src family selective tyrosine kinase inhibitor [51]. This compound inhibits Lck with an IC<sub>50</sub> of 4nM and Fyn with an IC<sub>50</sub> of 5nM. PP2 is slightly less potent against EGF-R (IC<sub>50</sub> = 0.45 μM) and inactive  
25 against ZAP-70 (IC<sub>50</sub> = 100 μM) [51]. PP1, an analog of PP2, shows approximately the same inhibitory activity against Lck [51]. To determine the structural basis for this selectivity, PP2 was co-crystallized with the kinase domain of Lck. This structure reveals that PP2 binds in the ATP binding site and induces little global conformational change in the enzyme. Superimposition of the Lck:PP2 and  
30 Lck:AMP-PNP structures yields an overall rms difference of 0.27 Å for the 278 C $\alpha$  atoms. The pyrazolo-pyrimidine ring of PP2 occupies a similar position in the Lck ATP binding cleft as the adenine ring of AMP-PNP (Figure 1C & 2C). This binding

mode places the 3-(4-chlorophenyl) substituent of PP2 in a hydrophobic pocket adjacent to the ATP binding cleft (Figure 3B & 3D). PP2 forms three hydrogen bonds with Lck, two of which are similar to those found in the Lck:AMP-PNP and Lck:staurosporine structures (Figure 1C & 2C). These are between the 4-amino group of PP2 and the backbone carbonyl of Glu317, and between the N5 of PP2 and the backbone NH of Met319. The third hydrogen bond, formed between the 4-amino group of PP2 and the side chain hydroxyl of Thr316, is unique in the structures reported here. The two conserved hydrogen bonds in the PP2:Lck complex are relatively long, with distances between donor and acceptor atoms of approximately 3.2 Å. PP2 also makes thirty-eight van der Waals interactions with Lck. Nineteen of these contacts come from the 3-(4-chlorophenyl) substituent, which is deeply buried inside the hydrophobic pocket. The *tert*-butyl substituent of the pyrazolo-pyrimidine contributes four van der Waals contacts to the complex. This substituent is located at the entrance of the ATP binding pocket and contacts residues from both the N- and C-terminal lobes of Lck.

The hydrophobic pocket occupied by the 3-(4-chlorophenyl) substituent of PP2 is defined by residues Thr316, Ile314, Met292, Glu288 and Lys273. The exact composition of this pocket appears to be unique to the Src family (Figure 5). For instance, Thr316, which is located at the entrance of the hydrophobic pocket, is not conserved in other tyrosine kinase families. ZAP-70 contains a methionine at this position which is likely to block access of this pocket to PP2-like inhibitors. This is consistent with the 100 µM IC<sub>50</sub> previously reported for PP2 against ZAP-70 [51]. Like Lck, the EGF receptor kinase has a threonine at the entrance of the hydrophobic pocket and is inhibited moderately by PP2 (IC<sub>50</sub> = 0.45 µM) [51]. The hydrophobic pocket in EGFR differs from the Src kinases by having a leucine at the position equivalent to Ile314 in Lck. In the Lck:PP2 complex, Ile314 contacts the 4-chloro substituent of the 3-phenyl ring. The presence of a leucine at this position in EGFR could partially account for the weaker inhibition of this receptor tyrosine kinase by PP2.

The structure of the Lck:PP2 complex helps explain the structure activity relationships (SAR) of a series of 4-Amino-1,3-diphenyl-pyrrolo[3,4d]pyrimidines that show a high degree of specificity towards c-Src [52]. The molecular structures of



these compounds are analogous to PP2, but have a phenyl ring at the N1 position of the pyrrole instead of a *tert*-butyl group (Figure 6C). A wide variety of polar moieties are well tolerated on this phenyl ring. The amino acid identity of the active sites of Lck and Src (defined as a 10 Å radius around ATP) is 89%. The amino acid  
5 composition of the ribose binding pocket within the Src family is completely conserved, while the hydrophobic pocket is less conserved. Superimposition of several of these compounds on our Lck:PP2 complex indicates that the polar groups on the N1-phenyl ring can interact favorably with hydrophilic residues in the ribose binding pocket (Ser343, Asp345), while the 3-phenyl group occupies the same region  
10 of the hydrophobic pocket as the 3-(4-chlorophenyl) group of PP2.

#### Comparison of ligand binding to Lck

Superimposition of the Lck:AMP-PNP, Lck:staurosporine and Lck:PP2 structures highlights similar features of inhibitor binding to the enzyme. The aromatic  
15 ring systems of the bound inhibitors occupy similar positions in the adenine binding pocket, as do their hydrogen bond donors and acceptors (Figure 6A & 6B). This results in a hydrogen bonding pattern to the backbone carbonyl of Glu317 and the amide of Met319 that is conserved in all three structures (Figure 1 & 2).

Staurosporine makes significantly more interactions with the glycine rich loop  
20 of Lck than does either AMP-PNP or PP2. The majority of these interactions are with residues that are highly conserved among protein kinases. These include Leu251, Gly252, Val259, Ala271, Lys273, Gly322 and Leu371, residues which are either absolutely or highly conserved among known tyrosine kinase sequences. PP2 by contrast, makes a number of interactions with residues that are specific to the Src  
25 family kinases by accessing a hydrophobic pocket neighboring the adenine binding region of Lck. This hydrophobic pocket exists in other kinases as well and has been exploited in the discovery of specific inhibitors. For example, the structures of FGF receptor and p38 MAP kinases bound with specific inhibitors show that the inhibitors gain both potency and specificity by placing substituents in this hydrophobic pocket  
30 of the enzyme [53-56]. However, the exact position and topology of the hydrophobic pockets of Lck, FGF-R, p38 and other kinases are likely to be defined not only by sequence but by additional factors, such as activation state or relative positioning of

the kinase N- and C-terminal domains. This diversity around the ATP-binding site provides opportunities for the discovery or design of potent, selective, small molecule inhibitors for specific protein kinases.

#### 5 Inhibition of Lck activity and T-cell receptor signaling

In the crystallographic studies presented here, the catalytic domain of Lck was used as a substitute for the full length protein. Previous studies have demonstrated that the Lck catalytic domain can be expressed and isolated as a constitutively active enzyme [40]. Nevertheless, a detailed comparison of the catalytic activities of Lck in  
10 the full length and truncated forms has not been reported. To provide a basis for the physiological relevance of our crystallographic studies, the  $IC_{50}$  values of staurosporine and PP2 were measured against these two forms of Lck. The full-length and catalytic domains of Lck displayed comparable specific activities (10 and 15 nmoles/min/nM enzyme) when assayed using a poly-GluTyr substrate. Furthermore,  
15 staurosporine ( $IC_{50}$  full length = 34 nM, kinase domain = 40 nM) and PP2 ( $IC_{50}$  full length = 19 nM, kinase domain = 20 nM) each inhibited both the full length and truncated forms of Lck to a similar extent in an autophosphorylation assay (Figure 7A).

The effect of staurosporine and PP2 on Lck-mediated phosphorylation of TCR  
20  $\zeta$ -chain and IL-2 production in human T-cells was also investigated. Both inhibitors showed a dose-dependent inhibition of Lck-dependent phosphorylation of the TCR  $\zeta$ -chain (p23), and also inhibited the phosphorylation of a 70 kD protein which is likely to be ZAP-70 (Figure 7C). Figure 7, panel B shows that staurosporine ( $IC_{50}$  = 60 nM) and PP2 ( $IC_{50}$  = 600 nM) also exhibited dose-dependent inhibition of IL-2 production  
25 in human T-cell cultures. The results of these *in vitro* and cellular studies suggests that the catalytic domain of Lck is a valid substitute for the full-length Lck as a molecular target for the development of new immunosuppressive therapeutic agents.

#### Biological significance

30 The molecular targets of currently used immunosuppressive drugs such as FK-506 and cyclosporine are broadly expressed in many different tissues and cell types. The non-immunosuppressant toxicity profiles of such drugs can be traced to the

inhibition of their targets in non-lymphoid tissues. Targeting Lck for the development of novel immunosuppressive drugs has promise as this enzyme is selectively expressed in T-cells and NK cells. Thus, agents that selectively inhibit Lck could lead to T-cell specific immunosuppression with improved therapeutic windows and broader clinical potential.

In the past few years much progress has been made in the design of selective kinase inhibitors. It has been established that highly specific ATP-competitive inhibitors can be obtained against a number of different kinases with clinical utility in oncology. In the present study, a comparison of several ligated Lck structures has provided valuable insight into the mode of binding of non-selective and Src family selective inhibitors. The structure of Lck in complex with AMP-PNP likely represents a conformation of Lck when ATP is bound prior to the binding of substrates and phospho-transfer. Analysis of the Lck:staurosporine complex reveals that binding of this inhibitor to Lck and other kinases induces a conformational change in the glycine rich loop, which helps maximize van der Waals interactions. This conformational change is mediated by a CH-O interaction that appears to be a common binding component for staurosporine with protein kinases. The non-selectivity of staurosporine may be explained by interactions with residues that are highly conserved in the ATP binding cleft. In contrast, the Src-selective inhibitor PP2 binds to Lck by accessing a hydrophobic pocket whose composition is unique to the Src family. The structures of these Lck complexes offer useful structural insights as they demonstrate binding modes that make differential use of various regions of the ATP binding cleft. Furthermore, these complexes indicate that kinase selectivity can be achieved with small molecule inhibitors that exploit subtle topological differences or sequence substitutions among protein kinases.

As used herein, the terms "sequence homology", or "homology", or "homologues", refers to the degree of identity or correspondence between nucleic acid or amino acid sequences of proteins. In a specific embodiment, two DNA sequences are "substantially homologous" or "substantially similar" when at least about 50% (preferably at least about 75% and most preferably at least about 90 or 95%) of the nucleotides match over the defined length of the DNA sequences. Sequences that are substantially homologous can be identified by comparing the sequences using

standard software available in sequence data banks, or in a Southern hybridization experiment under, for example, stringent conditions as defined for that particular system. Defining appropriate hybridization conditions is within the skill of the art. See, e.g., [Maniatis et al., *Molecular Cloning: A Laboratory Manual*, Second Edition, (1989); *DNA Cloning, Vols. I & II*, (D. Glover, ed. 1985); *Nucleic Acid Hybridization*, 5 B.D. Hames & S.J. Higgins, eds., (1985); *Current Protocols in Molecular Biology*, John Wiley & Sons, Inc. (1994); and references cited therein].

Similarly, in a particular embodiment, two amino acid sequences are "substantially homologous" or "substantially similar" when greater than about 30%, 10 alternatively greater than about 70%, or alternatively greater than about 90% of the amino acids are identical, or when greater than about 60%, alternatively greater than about 75%, or alternatively greater than 90% are similar (functionally identical). Preferably, the similar or homologous sequences are identified by alignment using, for example, the GCG (Genetics Computer Group, Program Manual for the GCG 15 Package, Version 7, Madison, WI) pileup program.

The term "active site" refers to any or all of the following: (i) the portion of the kinase sequence that binds to substrate, (ii) the portion of the kinase sequence that binds to an inhibitor, (iii) the portion of the kinase sequence that binds to ATP. The active site may also be characterized as comprising at least amino acid residues 259, 20 271, 371, 319, 251, 323, 314, 292, 316, 288, 273, 319, 320 and 317 of SEQ ID NO: 1.

Due to the degeneracy of nucleotide coding sequences, other DNA sequences which encode substantially the same amino acid sequence as a kinase gene may be used in the practice of the present invention. These include but are not limited to allelic genes, homologous genes from other species, and nucleotide sequences 25 comprising all or portions of kinase genes which are altered by the substitution of different codons that encode the same amino acid residue within the sequence, thus producing a silent change. Likewise, the kinase derivatives of the invention include, but are not limited to, those containing, as a primary amino acid sequence, all or part of the amino acid sequence of a kinase protein including altered sequences in which 30 functionally equivalent amino acid residues are substituted for residues within the sequence resulting in a conservative amino acid substitution. For example, one or more amino acid residues within the sequence can be substituted by another amino

acid of a similar polarity, which acts as a functional equivalent, resulting in a silent alteration. Substitutes for an amino acid within the sequence may be selected from other members of the class to which the amino acid belongs. For example, the nonpolar (hydrophobic) amino acids include alanine, leucine, isoleucine, valine, 5 proline, phenylalanine, tryptophan and methionine. Amino acids containing aromatic ring structures are phenylalanine, tryptophan, and tyrosine. The polar neutral amino acids include glycine, serine, threonine, cysteine, tyrosine, asparagine, and glutamine. The positively charged (basic) amino acids include arginine, lysine, and histidine. The negatively charged (acidic) amino acids include aspartic acid and glutamic acid. 10 Such alterations will not be expected to affect apparent molecular weight as determined by polyacrylamide gel electrophoresis, or isoelectric point. Abbreviations of amino acids are known in the art and are defined below:

	A = Ala = alanine	T = Thr = threonine
	V = Val = valine	C = Cys = cysteine
15	L = Leu = leucine	Y = Tyr = tyrosine
	I = Ile = isoleucine	N = Asn = asparagine
	P = Pro = proline	Q = Gln = glutamine
	F = Phe = phenylalanine	D = Asp = aspartic acid
	W = Trp = tryptophan	E = Glu = glutamic acid
20	M = Met = methionine	K = Lys = lysine
	G = Gly = glycine	R = Arg = arginine
	S = Ser = serine	H = His = histidine

The term "structure coordinates" refers to three-dimensional atomic coordinates derived from mathematical equations related to the experimentally 25 measured intensities obtained upon diffraction of a mono- or polychromatic beam of X-rays by the atoms (scattering centers) of a kinase or kinase-ligand complex in crystal form. The diffraction data may be used to calculate an electron density map of the repeating unit of the crystal. The electron density maps can be used to establish the positions of the individual atoms within the unit cell of the crystal. Alternatively, 30 computer programs such as XPLOR can be used to establish and refine the positions of individual atoms. Those of skill in the art understand that a set of structure coordinates determined by X-ray crystallography is not without error. For the

purposes of this invention, any set of structure coordinates for a kinase, particularly a src-family kinase, and more particularly Lck, or Lck homologues, that have a root mean square deviation of equivalent protein backbone atoms (N, C $\alpha$ , C and O) of less than about 1.50 Å, or alternatively less than about 1.00Å when superimposed, using  
5 backbone atoms, on the structure coordinates listed herein shall be considered identical and within the scope of the invention.

The term "unit cell" refers to a basic parallelepiped shaped block. The entire volume of a crystal may be constructed by regular assembly of such blocks. Each unit cell comprises a complete representation of the unit of pattern, the repetition of which  
10 builds up the crystal.

The term "space group" refers to the arrangement of symmetry elements of a crystal.

The term "complex" refers to a kinase (or kinase truncation or homologue) in covalent or non-covalent association with a ligand, such ligand including, for  
15 example, a chemical entity, compound, or inhibitor, candidate drug, and the like. The term "association" refers to a condition of proximity between the ligand and the kinase, or their respective portions thereof, in any appropriate physicochemical interaction.

The term "kinase", unless expressly stated to the contrary, refers to full length  
20 as well as truncated protein sequences, or subsequences, and homologues.

The term "globular core" refers to the general spatial shape of the of the core of the kinase enzyme.

The invention relates to a crystal of a protein-ligand complex comprising a protein-ligand complex of a kinase and a ligand, wherein the crystal effectively  
25 diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater (meaning better as used in this context throughout) than 5.0 Angstroms, alternatively greater than 3.0 Angstroms, or alternatively greater than 2.0 Angstroms; and wherein the kinase comprises amino acids 225 to 508 of SEQ ID NO: 1 or an amino acid sequence that differs from amino acids 225 to 508 of  
30 SEQ ID NO: 1 by only conservative substitutions; alternatively, wherein said kinase comprises the active site as defined herein. The invention also relates to a crystal of a protein-ligand complex comprising a protein-ligand complex of a kinase and a ligand,

wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms, alternatively greater than 3.0 Angstroms, or alternatively greater than 2.0 Angstroms; and wherein the kinase: (a) comprises amino acids 225 to 508 of SEQ ID NO: 1 or an amino acid sequence that differs from amino acids 225 to 508 of SEQ ID NO: 1 by only conservative substitutions (or alternatively, wherein said kinase comprises the active site as defined herein); and (b) retains the globular core of the corresponding full-length kinase. Other embodiments include the crystals above wherein the kinase is alternatively a src-family kinase, or alternatively Lck, or alternatively a truncated Lck sequence; those crystals above wherein the ligand is AMP-PNP, staurosporine or PP2, or alternatively AMP-PNP, or alternatively staurosporine, or alternatively PP2; and those wherein the ligand is Lck and the ligand is AMP-PNP, staurosporine or PP2, or alternatively AMP-PNP, or alternatively staurosporine, or alternatively PP2.

15 An alternate embodiment is the crystal of described above, wherein the kinase, or alternatively src-family kinase, or alternatively Lck, or alternatively truncated Lck, comprises an amino acid sequence of amino acids 251 to 371 of SEQ ID NO: 1, or an amino acid sequence that differs from amino acids 251 to 371 of SEQ ID NO: 1 by only conservative substitutions, or alternatively, wherein said kinase comprises the active site as defined herein. Other embodiments include such crystals wherein the kinase is alternatively a src-family kinase, or alternatively Lck, or alternatively a truncated Lck sequence; those crystals above wherein the ligand is AMP-PNP, staurosporine or PP2, or alternatively AMP-PNP, or alternatively staurosporine, or alternatively PP2; and those wherein the ligand is Lck and the ligand is AMP-PNP, staurosporine or PP2, or alternatively AMP-PNP, or alternatively staurosporine, or alternatively PP2.

An alternate embodiment is the crystal described above wherein the kinase-ligand complex comprises AMP-PNP and having space group of  $P2_12_12_1$  and a unit cell of dimensions of  $a = 42.1 \text{ \AA}$ ,  $b = 73.7 \text{ \AA}$ , and  $c = 91.7 \text{ \AA}$ .

30 An alternate embodiment is the crystal described above wherein the kinase-ligand complex comprises staurosporine and having space group of  $P2_12_12_1$  and a unit cell of dimensions of  $a = 42.2 \text{ \AA}$ ,  $b = 73.8 \text{ \AA}$ , and  $c = 91.4 \text{ \AA}$ .

An alternate embodiment is the crystal described above wherein the kinase-ligand complex comprises staurosporine and having space group of  $P2_12_12_1$  and a unit cell of dimensions of  $a = 61.5 \text{ \AA}$ ,  $b = 69.0 \text{ \AA}$ , and  $c = 73.7 \text{ \AA}$ .

5 An alternate embodiment is the crystal described above wherein the kinase-ligand complex comprises PP2 and having space group of  $P2_12_12_1$  and a unit cell of dimensions of  $a = 42.0 \text{ \AA}$ ,  $b = 73.7 \text{ \AA}$ , and  $c = 91.6 \text{ \AA}$ .

An alternate embodiment is the crystal described above wherein the kinase has secondary structural elements that include five beta strands and one helix in the N-terminal lobe (strands 1, 2, 3, 4 and 5 and alpha helix C), and two beta strands and  
10 seven alpha helices in the C-terminal domain (strands 6 & 8, and alpha helices D, E, EF, F, G, H and I).

Another embodiment is a method of using the kinase-ligand crystals described herein in an inhibitor screening assay comprising:

- 15 (a) selecting a potential inhibitor by performing rational drug design with the three-dimensional structure determined for the crystal, wherein said selecting is performed in conjunction with computer modeling;
- (b) contacting the potential inhibitor with the kinase; and
- (c) detecting the ability of the potential inhibitor for inhibiting the kinase.

Alternate embodiments are those wherein the detecting the ability of the potential  
20 inhibitor for inhibiting the kinase in step (c) is performed using an enzyme inhibition assay, or alternatively those wherein the detecting the ability of the potential inhibitor for inhibiting the kinase in step (c) is performed using a cellular-based assay. A further embodiment is this method further comprising:

- 25 (d) growing a supplemental crystal comprising a protein-ligand complex formed between the kinase and a first potential inhibitor from step (a), wherein the supplemental crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms;
- (e) determining the three-dimensional structure of the supplemental  
30 crystal;
- (f) selecting a second potential inhibitor by performing rational drug design with the three-dimensional structure determined for the



supplemental crystal, wherein said selecting is performed in conjunction with computer modeling;

(g) contacting the second potential inhibitor with the kinase; and

(h) detecting the ability of the second potential inhibitor for inhibiting the kinase.

5

In another embodiment, the invention relates to a method for identifying a potential inhibitor of kinase comprising:

(a) selecting or designing a potential inhibitor by performing rational drug design with the three-dimensional structure coordinates of any of Tables 1-4, or alternatively any two or more of Tables 1-4, wherein said selecting is performed in conjunction with computer modeling;

10

(b) contacting the potential inhibitor with the kinase; and

(c) detecting the ability of the potential inhibitor for inhibiting the kinase.

15

Alternate embodiments are those wherein the detecting the ability of the potential inhibitor for inhibiting the kinase in step (c) is performed using an enzyme inhibition assay, or alternatively those wherein the detecting the ability of the potential inhibitor for inhibiting the kinase in step (c) is performed using a cellular-based assay. In another embodiment, the potential inhibitor is designed *de novo*. In yet another embodiment, the potential inhibitor is designed from a known inhibitor. A further embodiment is this method further comprising:

20

(d) selecting an second potential inhibitor by performing rational drug design with the three-dimensional structure coordinates of any of Tables 1-4, or alternatively any combination of two or more of Tables 1-4, and the potential inhibitor of step (a), wherein said selecting is performed in conjunction with computer modeling;

25

(e) contacting the potential inhibitor with a kinase; and

(f) detecting the ability of the potential inhibitor for inhibiting the kinase.

In an alternate embodiment, the invention relates to a method of using the kinase to grow a crystal of a protein-ligand complex comprising:

30

(a) contacting a kinase with a ligand, wherein the kinase forms a protein-ligand complex with the ligand; and

(b) growing the crystal of the protein-ligand complex; wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms.

- 5 An alternate embodiment is this method wherein said growing is performed by hanging drop vapor diffusion. Another embodiment is this method wherein said ligand is PP2, staurosporine or AMP-PNP, or alternatively, said ligand is PP2.

In an alternate embodiment, the invention relates to a method of using a kinase to produce a crystal of a protein-ligand complex comprising contacting a  
10 kinase crystal with a ligand, wherein the kinase forms a protein-ligand complex with the ligand within the crystal, and wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms. Another embodiment is this method wherein said ligand is PP2, staurosporine or AMP-PNP, or alternatively, said ligand is PP2.

- 15 In an alternate embodiment, the invention relates to a method of growing a crystal of a kinase-ligand complex wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms, comprising:

- (a) contacting a kinase solution with a ligand, wherein kinase forms a  
20 protein-ligand complex with the ligand; and
- (b) growing the crystal of the protein-ligand complex; wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms.

- 25 An alternate embodiment is this method wherein said growing is performed by hanging drop vapor diffusion. Another embodiment is this method wherein said ligand is PP2, staurosporine or AMP-PNP, or alternatively, said ligand is PP2.

In another embodiment, this invention relates to a method of producing a crystal of a kinase-ligand complex wherein the crystal effectively diffracts X-rays for  
30 the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms, comprising contacting a kinase crystal with a ligand, wherein the kinase forms a protein-ligand complex with the ligand within the

crystal, and wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms. An alternate embodiment is this method wherein said ligand is PP2, staurosporine or AMP-PNP, or alternatively, said ligand is PP2.

5 Alternate embodiments of the invention are those crystals, and methods of using such crystals or structure coordinates thereof, described herein wherein the crystals further comprise a nucleoside or nucleotide cofactor or substrate, or further comprise any one of ATP, GTP, Mg, Mn, peptides or polymeric amino acids.

In each of the methods described herein, further embodiments are those  
10 wherein the kinase is a src-family kinase, alternatively Lck, or alternatively, truncated Lck.

In another embodiment, the invention relates to a method of using the three-dimensional structure coordinates of any one of Tables 1-4, or alternatively any combination of two or more of Tables 1-4, comprising:

- 15 (a) Determining structure factors from the coordinates; and  
(b) Applying said structure factor information to a set of X-ray diffraction data obtained from a crystal of a protein homologous to SEQ ID NO: 1;  
(c) Solving the three-dimensional structure of the protein homologous  
20 to SEQ ID NO: 1.

In another embodiment, the invention relates to a computer-readable data storage medium ("CRM") comprising a data storage material encoded with computer readable data, which when used by a computer programmed with instructions for using such data, displays a three-dimensional graphical representation of a molecule  
25 or molecular complex comprising a binding pocket defined by structure coordinates of SEQ ID NO.: 1, or alternatively by structure coordinates of an active site as defined herein, or a homologue of said molecule or molecular complex, wherein said homologue comprises a binding pocket that has a root mean square deviation from the backbone atoms of said amino acids of less than about 1.50Å, or alternatively less  
30 than about 1.00Å. In another embodiment, the aforementioned structure coordinates are those of any one or more of Tables 1-4, or a subset thereof, including the coordinates relating to the active site as defined herein.

The computer may comprise a central processing unit ("CPU"), a working memory, for example, random access memory ("RAM") and/or storage memory in the form of one or more disk drives (e.g., floppy, Zip™, Jazz™), tape drives, CD-ROM drives, DVD drives, and the like, a display terminal such as for example, a cathode ray tube type display, and input and output lines for data transmission, including a keyboard and/or mouse controller. The computer may be a stand-alone, or connected to a network and/or shared server. Data storage materials include, for example, hard drives, floppy, Zip™ and Jazz™ type disks, tapes, CDs, and DVDs.

In another embodiment, the invention relates to a computer readable data storage material encoded with computer readable data comprising structure coordinates of any one or more of Tables 1-4, or alternatively, encoded with computer readable data comprising structure coordinates of the active site of any one or more of Tables 1-4.

In another embodiment, the invention relates to a method for identifying a potential inhibitor of a kinase comprising:

- (a) selecting or designing a potential inhibitor by performing rational drug design with a computer readable data storage material encoded with computer readable data comprising structure coordinates of any one or more of Tables 1-4, wherein said selecting is performed in conjunction with computer modeling;
- (b) contacting the potential inhibitor with a kinase; and
- (c) detecting the ability of the potential inhibitor for inhibiting the kinase.;

In another embodiment, the computer readable data storage material in step (a) is encoded with computer readable data comprising structure coordinates of the active site of any one or more of Tables 1-4.

Table 1 contains the X-ray structure coordinates of an Lck:PP2 complex. Tables 2 and 3 contain the X-ray structure coordinates of an Lck:AMP-PNP complex. Table 4 contains the X-ray structure coordinates of an Lck:staurosporine complex. Table 5 summarizes the diffraction data and refined model of Tables 1-4.

Crystals of the kinase or kinase-ligand complex can be produced or grown by a number of techniques including batch crystallization, vapor diffusion (either by sitting drop or hanging drop), soaking, and by microdialysis. Seeding of the crystals

in some instances is required to obtain X-ray quality crystals. Standard micro and/or macro seeding of crystals may therefore be used. Preferably, the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution greater than 5.0 Angstroms, alternatively greater than 3.0 Angstroms, or alternatively greater than 2.0 Angstroms. Exemplified in the Examples section below is the hanging-drop vapor diffusion procedure.

Once a crystal of the present invention is produced, X-ray diffraction data can be collected. The example below used standard cryogenic conditions for such X-ray diffraction data collection though alternative methods may also be used. For example, diffraction data can be collected by using X-rays produced in a conventional source (such as a sealed tube or rotating anode) or using a synchrotron source. Methods of X-ray data collection include, but are not limited to, precession photography, oscillation photography and diffractometer data collection. Data can be processed using packages including, for example, DENZO and SCALPACK (Z. Otwinowski and W. Minor) and the like.

The three-dimensional structure of the protein or protein-ligand complex constituting the crystal may be determined by conventional means as described herein. Where appropriate, the structure factors from the three-dimensional structure coordinates of a related protein may be utilized to aid the structure determination of the protein-ligand complex. Structure factors are mathematical expressions derived from three-dimensional structure coordinates of a molecule. These mathematical expressions include, for example, amplitude and phase information. The term "structure factors" is known to those of ordinary skill in the art. Alternatively, the three-dimensional structure of the protein-ligand complex may be determined using molecular replacement analysis. This analysis utilizes a known three-dimensional structure as a search model to determine the structure of a closely related protein-ligand complex. The measured X-ray diffraction intensities of the crystal are compared with the computed structure factors of the search model to determine the position and orientation of the protein in the protein-ligand complex crystal. Computer programs that can be used in such analyses include, for example, X-PLOR and AmoRe (J. Navaza, *Acta Crystallographica ASO*, 157-163 (1994)). Once the position and orientation are known, an electron density map may be calculated using

the search model to provide X-ray phases. The electron density can be inspected for structural differences and the search model may be modified to conform to the new structure. Using this approach, one may use the structure of the kinase-ligand complex or complexes described herein to solve other kinase-ligand complex crystal structures, or other kinase crystal structures, particularly where the kinase is homologous to Lck. Computer programs that can be used in such analyses include, for example, QUANTA and the like.

Upon determination of the three-dimensional structure of a crystal of a kinase-ligand complex, a potential inhibitor may be evaluated by any of several methods, alone or in combination. Such evaluation may utilize visual inspection of a three-dimensional representation of the active site, based on the X-ray coordinates of a crystal described herein, on a computer screen. Evaluation, or modeling, may be accomplished through the use of computer modeling techniques, hardware, and software known to those of ordinary skill in the art. This may additionally involve model building, model docking, or other analysis of kinase-ligand interactions using software including, for example, QUANTA or SYBYL, followed by energy minimization and molecular dynamics with standard molecular mechanics forcefields including, for example, CHARMM and AMBER. The three-dimensional structural information of a kinase-ligand complex may also be utilized in conjunction with computer modeling to generate computer models of other kinase protein structures, particularly those with homology to the kinase from which the three-dimensional structural information was determined. Using the structure coordinates described herein, computer models of kinase protein structures of src-family kinases, or of kinases that share sequence homology in the kinase domain or the active site as compared to Lck, may be created using standard methods and techniques known to those of ordinary skill in the art, including software packages described herein.

Once the three-dimensional structure of a crystal comprising a protein-ligand complex formed between a kinase and a standard ligand for that kinase is determined, a potential ligand is examined through the use of computer modeling using a docking program such as FLEX X, DOCK, or AUTODOCK (see, Dunbrack et al., *Folding & Design*, 2:R27-42 (1997)), to identify potential ligands and/or inhibitors for kinases. This procedure can include computer fitting of potential ligands to the ligand binding

site to ascertain how well the shape and the chemical structure of the potential ligand will complement the binding site. [Bugg et al., Scientific American, December:92-98 (1993); West et al., TIPS, 16:67-74 (1995)]. Computer programs can also be employed to estimate the attraction, repulsion, and steric hindrance of the two binding  
5 partners (i.e., the ligand-binding site and the potential ligand). Generally the tighter the fit, the lower the steric hindrances, and the greater the attractive forces, the more potent the potential drug since these properties are consistent with a tighter binding constant. Furthermore, the more specificity in the design of a potential drug, the more likely that the drug will not interact as well with other proteins. This will minimize  
10 potential side-effects due to unwanted interactions with other proteins.

A variety of methods are available to one skilled in the art for evaluating and virtually screening molecules or chemical fragments appropriate for associating with a protein, particularly a kinase enzyme. Such association may be in a variety of forms including, for example, steric interactions, van der Waals interactions, electrostatic  
15 interactions, solvation interactions, charge interactions, covalent bonding interactions, non-covalent bonding interactions (e.g., hydrogen-bonding interactions), entropically or enthalpically favorable interactions, and the like.

Numerous computer programs are available and suitable for rational drug design and the processes of computer modeling, model building, and computationally  
20 identifying, selecting and evaluating potential inhibitors in the methods described herein. These include, for example, GRID (available from Oxford University, UK), MCSS (available from Molecular Simulations Inc., Burlington, MA), AUTODOCK (available from Oxford Molecular Group), FLEX X (available from Tripos, St. Louis, MO), DOCK (available from University of California, San Francisco), CAVEAT  
25 (available from University of California, Berkeley), HOOK (available from Molecular Simulations Inc., Burlington, MA), and 3D database systems such as MACCS-3D (available from MDL Information Systems, San Leandro, CA), UNITY (available from Tripos, St. Louis, MO), and CATALYST (available from Molecular Simulations Inc., Burlington, MA). Potential inhibitors may also be computationally designed "*de*  
30 *novo*" using such software packages as LUDI (available from Biosym Technologies, San Diego, CA), LEGEND (available from Molecular Simulations Inc., Burlington, MA), and LEAPFROG (Tripos Associates, St. Louis, MO). Compound deformation

energy and electrostatic repulsion, may be evaluated using programs such as GAUSSIAN 92, AMBER, QUANTA/CHARMM, AND INSIGHT II/DISCOVER. These computer evaluation and modeling techniques may be performed on any suitable hardware including for example, workstations available from Silicon  
5 Graphics, Sun Microsystems, and the like. These techniques, methods, hardware and software packages are representative and are not intended to be comprehensive listing. Other modeling techniques known in the art may also be employed in accordance with this invention. See for example, N.C. Cohen, *Molecular Modeling in Drug Design*, Academic Press (1996) (and references therein), and software identified at  
10 internet sites including the CAOS/CAMM Center Cheminformatics Suite at <http://www.caos.kun.nl/>, and the NIH Molecular Modeling Home Page at [http://www.fi.muni.cz/usr/mejzlik/mirrors/molbio.info.nih.gov/modeling/software list](http://www.fi.muni.cz/usr/mejzlik/mirrors/molbio.info.nih.gov/modeling/software/list/)  
/.

A potential inhibitor is selected by performing rational drug design with the  
15 three-dimensional structure (or structures) determined for the crystal described herein, especially in conjunction with computer modeling and methods described above. The potential inhibitor is then obtained from commercial sources or is synthesized from readily available starting materials using standard synthetic techniques and methodologies known to those of ordinary skill in the art. The potential inhibitor is  
20 then assayed to determine its ability to inhibit the target enzyme and/or enzyme pathway as described above.

The potential inhibitor selected or identified by the aforementioned process may be assayed to determine its ability to inhibit the target enzyme and/or enzyme pathway. The assay may be *in vitro* or *in vivo*. Inhibition can be measured by various  
25 methods, including, for example, those methods illustrated in the examples below. The compounds described herein may be used in assays, including radiolabelled, antibody detection and fluorometric, for the isolation, identification, or structural or functional characterization of enzymes, peptides or polypeptides. Such assays include any assay wherein a nucleoside or nucleotide are cofactors or substrates of the peptide  
30 of interest, and particularly any assay involving phosphotransfer in which the substrates and or cofactors are ATP, GTP, Mg, Mn, peptides or polymeric amino acids. The assay may be an enzyme inhibition assay, utilizing a full length or



truncated kinase, said enzyme having sequence homology with that of mammalian origin, including for example, human, murine, rat, and the like. The enzyme is contacted with the potential inhibitor and a measurement of the binding affinity of the potential inhibitor against a standard is determined. Such assays are known to one of ordinary skill in the art and are exemplified in the examples herein. The assay may also be a cell-based assay. The potential inhibitor is contacted with a cell and a measurement of inhibition of a standard marker produced in the cell is determined. Cells may be either isolated from an animal, including a transformed cultured cell, or may be in a living animal. Such assays are also known to one of ordinary skill in the art and are exemplified in the examples herein.

When suitable potential ligands are identified as described above, a supplemental crystal can be produced or grown (using techniques described herein) that comprises a protein-ligand complex formed between a kinase, src kinase, lck, or truncated lck and the potential ligand. Preferably, the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution greater than 5.0 Angstroms, alternatively greater than 3.0 Angstroms, or alternatively greater than 2.0 Angstroms. The three-dimensional structure of the protein-ligand complex constituting the supplemental crystal may be determined by conventional means such as those described herein.

A potential inhibitor is selected by performing rational drug design with the three-dimensional structure (or structures) determined for the supplemental crystal, especially in conjunction with computer modeling described above. The potential inhibitor is then obtained from commercial sources or is synthesized from readily available starting materials using standard synthetic techniques and methodologies known to those of ordinary skill in the art. The potential inhibitor is then assayed to determine its ability to inhibit the target enzyme and/or enzyme pathway as described above.

For all potential inhibitor assays described herein, further refinements to the structure of the potential inhibitor will generally be necessary and can be made by successive iterations of any/or all of the steps provided by the inhibitor screening assay.

The inhibitors identified by the methods described herein may also be useful for inhibition of kinase activity of one or more enzymes. Kinases include, for example, protein kinases, lipid kinases (e.g., phosphatidylinositol kinases PI-3, PI-4) and carbohydrate kinases. Kinases may be of prokaryotic, eukaryotic, bacterial, viral, 5 fungal or archaea origin. Specifically, the compounds described herein are useful as inhibitors of tyrosine, serine/threonine or histidine protein kinases. Examples of kinases that are inhibited by the compounds and compositions described herein and against which the methods described herein are useful include, but are not limited to, LCK, IRK (= INSR = Insulin receptor), IGF-1 receptor, SYK, ZAP-70, IRAK1, 10 IRAK2, BLK, BMX, BTK, FRK, FGR, FYN, HCK, ITK, LYN, TEC, TXK, YES, ABL, SRC, EGF-R (= ErbB-1), ErbB-2 (= NEU = HER2), ErbB-3, ErbB-4, FAK, FGF1R (= FGR-1), FGF2R (= FGR-2), IKK-1 (= IKK-ALPHA = CHUK), IKK-2 (= IKK-BETA), MET (= c-MET), NIK, PDGF receptor ALPHA, PDGF receptor BETA, TIE1, TIE2 (= TEK), VEGFR1 (= FLT-1), VEGFR2 (= KDR), FLT-3, FLT-4, KIT, 15 CSK, JAK1, JAK2, JAK3, TYK2, RIP, RIP-2, LOK, TAK1, RET, ALK, MLK3, COT, TRKA, PYK2, EPHB4, RON, GSK3, UL13, ORF47, ATM, CDK (including all subtypes), PKA, PKB (including all PKB subtypes) (=AKT-1, AKT-2, AKT-3), PKC (including all PKC subtypes), and bARK1 (=GRK2) (and other G-protein coupled receptor kinases (GRKs)), and all subtypes or isoforms of these kinases. The 20 inhibitors identified by the methods described herein are suitable for use in the treatment of diseases and disease symptoms that involve one or more of the aforementioned protein kinases. In one embodiment, the inhibitors identified by the methods described herein are particularly suited for inhibition of or treatment of disease or disease symptoms mediated by src-family kinases. In an alternate 25 embodiment, the inhibitors described herein are particularly suited for inhibition of LCK.

The inhibitors described herein are also useful for inhibiting the biological activity of any enzyme comprising greater than 90%, alternatively greater than 85%, or alternatively greater than 70% sequence homology with a kinase sequence, 30 including the kinases mentioned herein. The inhibitors described herein are also useful for inhibiting the biological activity of any enzyme comprising a subsequence, or variant thereof, of any enzyme that comprises greater than 90%, alternatively

greater than 85%, or alternatively greater than 70% sequence homology with a kinase subsequence, including subsequences of the kinases mentioned herein. Such subsequence preferably comprises greater than 90%, alternatively greater than 85%, or alternatively greater than 70% sequence homology with the sequence of an active  
5 site or subdomain of a kinase enzyme. The subsequences, or variants thereof, comprise at least about 250 amino acids, or alternatively at least about 120 amino acids.

The inhibitors described herein are useful for inhibiting the biological activity of any enzyme that binds ATP and thus for treating disease or disease symptoms  
10 mediated by any enzyme that binds ATP. The inhibitors described herein are also useful for inhibiting the biological activity of any enzyme that is involved in phosphotransfer and thus for treating disease or disease symptoms mediated by any enzyme that is involved in phosphotransfer. The inhibitors described herein are also useful for inhibiting the biological activity of a polypeptide or enzyme having  
15 sequence homology with a kinase sequence and thus for treating disease or disease symptoms mediated by such polypeptide or enzyme. Such polypeptides or enzymes may be identified by comparison of their sequence with kinase sequences and kinase catalytic domain sequences. For example, one method of comparison involves the database PROSITE (<http://expasy.hcuge.ch>), containing "signatures" or sequence  
20 patterns (or motifs) or profiles of protein families or domains. Thus, the inhibitors described herein are useful for inhibiting the biological activity of a polypeptide or enzyme comprising a sequence that comprises a "signature" or sequence pattern or profile derived for, and identified in PROSITE as relating to kinases, and for treating disease or disease symptoms mediated by such polypeptide or enzyme. Examples of  
25 such PROSITE motifs or consensus patterns identified as relating to kinases include PS00107, PS00108, PS00109, PS50011, PS00915, and PS00916. The term "kinases" as used in this application, unless expressly stated to the contrary, refers to protein sequences that comprise such signature, motif, or sequence or consensus patterns.

The inhibitors described herein are useful in inhibiting kinase activity. As  
30 such, the compounds, compositions and methods of this invention are useful in treating kinase-mediated disease or disease symptoms in a mammal, particularly a human. Kinase mediated diseases are those wherein a protein kinase is involved in

signaling, mediation, modulation, or regulation of the disease process. Kinase mediated diseases are exemplified by the following disease classes: cancer, autoimmune, metabolic, inflammatory, infection (bacterial, viral, yeast, fungal, etc.), central nervous system degenerative disease, allergy/asthma, angiogenesis, cardiovascular disease, and the like.

The inhibitors described herein are useful in treating or preventing diseases, including, transplant rejection (e.g., kidney, liver, heart, lung, pancreas (islet cells), bone marrow, cornea, small bowel, skin allografts or xenografts), graft versus host disease, osteoarthritis, rheumatoid arthritis, multiple sclerosis, juvenile diabetes, asthma, inflammatory bowel disease (Crohn's disease, ulcerative colitis), cachexia, septic shock, lupus, diabetes mellitus, myasthenia gravis, psoriasis, dermatitis, eczema, seborrhea, Alzheimer's disease, Parkinson's disease, stem cell protection during chemotherapy, *ex vivo* purging for autologous or allogeneic bone marrow transplantation, cancer (breast, lung, colorectal, ovary, prostate, renal, squamous cell, prostate, etc.), bacterial infections, viral infections, fungal infections and heart disease, including but not limited to, restenosis.

Synthetic chemistry transformations and protecting group methodologies (protection and deprotection) useful in synthesizing the inhibitor compounds described herein are known in the art and include, for example, those such as described in R. Larock, *Comprehensive Organic Transformations*, VCH Publishers (1989); T.W. Greene and P.G.M. Wuts, *Protective Groups in Organic Synthesis*, 2d. Ed., John Wiley and Sons (1991); L. Fieser and M. Fieser, *Fieser and Fieser's Reagents for Organic Synthesis*, John Wiley and Sons (1994); and L. Paquette, ed., *Encyclopedia of Reagents for Organic Synthesis*, John Wiley and Sons (1995).

The inhibitors described herein may contain one or more asymmetric centers and thus occur as racemates and racemic mixtures, single enantiomers, individual diastereomers and diastereomeric mixtures. All such isomeric forms of these compounds are expressly included in the present invention. The inhibitors described herein may also be represented in multiple tautomeric forms, all of which are included herein. The inhibitors may also occur in cis- or trans- or E- or Z- double bond isomeric forms. All such isomeric forms of such inhibitors are expressly included in

the present invention. All crystal forms of the inhibitors described herein are expressly included in the present invention.

All references cited herein, whether in print, electronic, computer readable storage media or other form, are expressly incorporated by reference in their entirety, including but not limited to, abstracts, articles, journals, publications, texts, treatises,  
5 internet web sites, databases, software packages, patents, and patent publications.

In order that the invention described herein may be more readily understood, the following examples are set forth. It should be understood that these examples are for illustrative purposes only and are not to be construed as limiting this invention in  
10 any manner.

### Examples

#### Example 1

*Construct design, protein expression and purification.* Full-length LCK cDNA (gift of T. Roberts, DFCI) was used as a template for PCR amplification of a 879 bp fragment encoding amino acid residues 225 to 509 of the Lck catalytic domain. The PCR product was cloned into the Bam HI and Eco RI sites of the  
20 plasmid vector pFastBac1 (Gibco/BRL) modified to contain the coding region for GST and a thrombin cleavage site upstream of the multiple cloning site. Recombinant baculovirus was obtained using the Bac-to-Bac expression system (Gibco/BRL). After two rounds of amplification in Sf9 insect cells (*Spodoptera frugiperda*) cultured in Hink's modification of Graces media, the virus was used to infect High Five insect  
25 cells (*trichoplusia ni*) cells grown in Ex-cell 405 media for protein production.

Recombinant GST-Lck (225-509) was purified from baculovirus cells essentially as previously described [40], except that the first step involved fractionating cell lysates on glutathione Sepharose (Pharmacia Biotech). The GST-Lck bound to the resin was eluted with 30 mM glutathione and cleaved overnight at  
30 4°C with the fusion protein at 0.5 mg/ml and  $\alpha$ -thrombin added at a 1:1000 ratio (w/w). A protease inhibitor cocktail was then added and the protein sample was incubated for 30 min at 25°C. The inhibition of thrombin was confirmed in a

spectrophotometric assay as described [57, 58]. The cleaved GST and Lck were separated by anion exchange chromatography essentially as described for the separation of Lck phosphorylation species [40]. The pooled fraction of Lck was then concentrated in a centrprep-10 and size fractionated on a column of Superdex-75.

5 The monomeric fraction appeared homogeneous by SDS and native polyacrylamide gel electrophoresis.

### Example 2

*Structural determination.* Crystals of the Lck kinase domain in complex with

10 AMP-PNP/Mg (5mM) were grown from 1.6M ammonium sulfate in 0.1M bisTris (pH6.5) by the hanging drop method. These crystals are isomorphous to the apo Lck [40]. Crystals of apo Lck were obtained under the same condition as described above by microseeding the apo protein sample with the crystals of Lck:AMP-PNP. These crystals were subsequently soaked for three days in a solution containing 1.6M

15 ammonium sulfate, 0.1M bisTris (pH6.5) and 0.3mM staurosporine. Lck:PP2 crystals are obtained by similar methods.

Crystals of Lck:AMP-PNP and Lck:staurosporine (soaked) were equilibrated against a solution containing 1.6M ammonium sulfate, 0.1M bisTris and 20% ethylene glycol and frozen at 100K for data collection. Diffraction data of the crystals

20 of Lck:AMP-PNP were collected at the X4A beamline at Brookhaven National Laboratory using an Raxis-IV image plate detector or were collected on an Raxis-II image plate detector mounted on the RU300 generator. Diffraction data for Lck:PP2 was collected on an Raxis-II image plate detector mounted on the RU300 generator. Lck:PP2 crystals were equilibrated as above prior to freezing,. All data were

25 processed using the HKL software package (Z. Otwinowski).

The structure of the Lck:staurosporine co-complex was solved by molecular replacement using the program AmoRe (J. Navaza). The apo Lck structure was used as a search model. The initial molecular replacement solution was subject to rigid body and positional refinement using XPLOR [59] (Molecular Simulations, Inc.)

30 Bound ligands were identified using the difference fourier method phased by the structure of the apo Lck [40]. Model building of protein and inhibitor into electron density maps were performed using the graphic program Quanta (Molecular

Simulations, Inc.), and the structures were refined using XPLOR [59]. The graphic figures were made by using Grasp [60] and Setor [61].

### Example 3

5        *Kinase activity assays.* Protein kinase activity was measured in two different *in vitro* assays. In the first assay, the kinase of interest was incubated with [<sup>33</sup>P]-ATP in a 96-well plate previously coated with substrate (i.e. poly[Glu, Tyr]4:1) and the kinase activity determined in a Microbeta, Wallac Top-Count (Packard Instruments). In the second assay, protein kinase autophosphorylation was examined. GST fused  
10    Lck proteins consisting of either the kinase domain (Residues 225-509) or nearly full length (Residues 66-509) sequences were incubated in 10 mM Mg<sup>2+</sup>, 25 mM Tris 7.5, 1 mM DTT, 1 μM ATP (10 μCi/ml [<sup>33</sup>P]ATP) for 5 minutes at room temperature with the indicated concentration of compounds. The reaction was stopped by addition of  
15    one volume of 10% TCA and filtered through a millipore filter plate. After 3 washes with 200 μl 10% TCA, 50 μl of scintillation cocktail was added to each well and the plate was read in a microbeta scintillation counter (Wallach).

### Example 4

20        *T-cell activation.* Whole blood was obtained from normal donors and human peripheral blood lymphocytes (hPBL) were isolated by ficol-hypaque density centrifugation. T-cells were then purified from the hPBL by negative selection using an R&D column following the manufacturers directions (R&D Systems, Minneapolis, MN). A 96-well flat-bottomed plate was coated with 10 μg/ml of goat anti-mouse (GAM)-IgG<sub>1</sub> (Caltag, Burlingame, CA) in PBS overnight at 4C. The GAM-coated  
25    plate was flicked out and anti-CD3 mAb (UCHT-1, Coulter/Immunotech, Miami, FL) is added at 0.2 μg/ml in AIMV medium (Gibco, Grand Island, NY) for 3 hr. at 37C. Purified T-cells were pre-incubated at 1 x 10<sup>5</sup>/well in AIM V with or without compound for 30 minutes then transferred to the anti-CD3 capture plate. Finally, anti-CD28 (Pharmingen, San Diego, CA) in AIMV (150 ng/ml final) was added to  
30    each well. Cells were incubated for 20 hours at 37C in 5% CO<sub>2</sub> then supernatants were tested by ELISA for cytokine levels (Endogen, Woburn, MA).

### Example 5

*Phosphotyrosine western blotting.* Jurkat (ATCC, Manassas, VA) cells ( $1 \times 10^7$ ) in RPMI-1640 (Gibco, Grand Island, NY) containing 10% FCS (Sigma, St. Louis, MO) were incubated with or without anti-CD3 mAb (UCHT-1, 10  $\mu$ g/ml) for 5 15 minutes on ice. Cells were washed in cold PBS then incubated with or without GAM-IgG<sub>1</sub> (10  $\mu$ g /ml) in RPMI-1640 containing 10% FCS for 15 minutes on ice. Cells were then transferred to 37C° water bath for 1 minute. Stimulation was stopped by the addition of 5 volumes of cold PBS containing 200  $\mu$ M sodium orthovanadate. Cells were spun down and lysed in 150 mM Tris/10 mM HEPES buffer, pH 7.3, 10 containing 1% Triton X-100 and Complete protease inhibitor cocktail (Boehringer Mannheim, Germany) for 30 minutes on ice. Whole cell lysates ( $2 \times 10^6$ /cell equivalents per lane) were separated by 14% reducing SDS-PAGE and transferred to PVDF membrane. Blots were probed with anti-phosphotyrosine (4G10, Upstate Biotechnology, Inc., Saranac Lake, NY) and developed using ECL-plus following the 15 manufacturers directions (Amersham, Arlington Heights, IL).

### Example 6

Kinases suitable for use in the following protocol to determine kinase activity of the compounds described herein include, but are not limited to: Lck, Lyn, Src, Fyn, 20 Syk, Zap-70, Itk, Tec, Btk, EGFR, ErbB2, Kdr, Tek, c-Met, InsR.

Kinases are expressed as either kinase domains or full length constructs fused to glutathione S-transferase (GST) or polyHistidine tagged fusion proteins in either E. coli or Baculovirus-High Five expression systems. They are purified to near homogeneity by affinity chromatography essentially as previously described (Lehr et 25 al., 1996; Gish et al., 1995). In some instances, kinases are co-expressed or mixed with purified or partially purified regulatory polypeptides prior to measurement of activity.

Kinase activity and inhibition are measured essentially by established protocols (Braunwalder et al., 1996). Briefly, The transfer of  $^{33}\text{PO}_4$  from ATP to the 30 synthetic substrates poly(Glu, Tyr) 4:1 or poly(Arg, Ser) 3:1 attached to the bioactive surface of microtiter plates serves as the basis to evaluate enzyme activity. After an incubation period, the amount of phosphate transferred is measured by first washing



the plate with 0.5% phosphoric acid, adding liquid scintillant, and then counting in a liquid scintillation detector. The IC<sub>50</sub> is determined by the concentration of compound that causes a 50% reduction in the amount of <sup>33</sup>P incorporated onto the substrate bound to the plate.

5           Other similar methods whereby phosphate is transferred to peptide or polypeptide substrate containing tyrosine, serine, threonine, or histidine, either alone, in combination, or in combination with other amino acids, in solution or immobilized (i.e., solid phase) are also useful. Alternatively, kinase activity can be measured using antibody-based methods whereby an antibody or polypeptide is used as a reagent to  
10   detect phosphorylated target polypeptide.

Example 6 References:

Braunwalder AF, Yarwood DR, Hall T, Missbach M, Lipson KE, Sills MA. (1996). A solid-phase assay for the determination of protein tyrosine kinase activity of c-src using scintillating microtitration plates. *Anal. Biochem.* 234(1):23-26.  
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Gish G, McGlone ML, Pawson T, Adams JA. (1995). Bacterial expression, purification and preliminary kinetic description of the kinase domain of v-fps. *Protein Eng.* 8(6):609-614.  
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Example 7

The cellular activities of the inhibitor compounds described herein may be assessed in a number of assays known to those skilled in the art, some of which are exemplified as described below. Typical sources for cells include, but are not limited  
30 to, human bone marrow or peripheral blood lymphocytes, or their equivalents, or rodent spleen cells. Transformed cell lines that have been reported as cytokine- and growth factor-dependent cells are available from standard cell banks such as The American Type Culture Collection (Bethesda, MD). Cells genetically manipulated to express a particular kinase or kinases are also suitable for use in assaying cellular  
35 activity. These cells are grown in various standard tissue culture media available from suppliers such as GIBCO/BRL (Grand Island, NY) supplemented with fetal bovine

serum. Cellular activity may also be measured using bacterial, yeast, or virally infected mammalian cells. Standard inhibitors of cell activation include mycophenolic acid (SIGMA, St. Louis, MO), staurosporine (Calbiochem, San Diego, CA), wortmannin (Calbiochem), cyclosporine, FK-506, and steroids (e.g., corticosteroids).

5       The compound(s) are tested for activity in cellular assays of T or B cell activation. For example, the receptor-induced production of cytokines and/or cell proliferation is a useful measure. This assay is performed similarly to techniques described in the literature (1,2), and involves antibody-, antigen-, mitogen-, or antigen presenting cell-mediated crosslinking of the T cell or B cell receptor with or without  
10       engagement of co-stimulatory receptors.

      The compound(s) are tested for activity in cellular assays of allergic mediator release. For example, the receptor-induced degranulation in mast cells or basophils leading to histamine release and the production of cytokines is a useful measure. This assay is performed similarly to techniques described in the literature (3), and involves  
15       crosslinking of antigen-specific IgE on cells leading to degranulation and or cytokine production.

      The compound(s) are tested for activity in cellular assays of growth factor effects. For example, growth factor receptor-induced signaling in a cell leading to intracellular signaling events such as kinase autophosphorylation, phosphorylation of  
20       relevant kinase substrates, phosphorylation of MAP kinases, or induction of gene expression. Also, for example, growth factor-induced functional events in cells such as DNA synthesis, proliferation, migration, or apoptosis. These assays are performed similarly to techniques described in the literature (4-7), and involve addition of growth factor to responsive cells followed by monitoring of signaling or functional  
25       events.

      The compound(s) are tested for activity in cellular assays of cytokine activation. For example, cytokine-induced intracellular signaling events and/or cell proliferation and/or cytokine production are a useful measure. This assay is performed similarly to techniques described in the literature (8), and involves addition of  
30       cytokine to responsive cells followed by monitoring intracellular signaling events and/or cell proliferation and/or cytokine production.

## Example 7 References:

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While we have described a number of embodiments of this invention, it is apparent that our basic examples may be altered to provide other embodiments that utilize the products and processes of this invention. Therefore, it will be appreciated that the scope of this invention is to be defined by the claims rather than by the specific embodiments that have been represented by way of example.

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Table 1  
Coordinates of Lck bound with PP2

5	B	Atom				X	Y	Z	Occ
		Type	Res	#					
		ATOM	1 CB	LYS	231	0.991	26.799	89.459	1.00
		35.40							
10		ATOM	2 CG	LYS	231	0.374	26.962	88.107	1.00
		37.62							
		ATOM	3 CD	LYS	231	0.905	25.834	87.245	1.00
		39.89							
15		ATOM	4 CE	LYS	231	0.214	25.740	85.904	1.00
		41.37							
		ATOM	5 NZ	LYS	231	0.933	24.716	85.076	1.00
		41.65							
		ATOM	9 C	LYS	231	1.694	27.685	91.603	1.00
		31.30							
20		ATOM	10 O	LYS	231	2.774	28.259	91.645	1.00
		31.13							
		ATOM	13 N	LYS	231	1.184	29.238	89.851	1.00
		34.51							
25		ATOM	15 CA	LYS	231	0.763	27.931	90.450	1.00
		32.98							
		ATOM	16 N	PRO	232	1.278	26.851	92.579	1.00
		30.24							
		ATOM	17 CD	PRO	232	-0.033	26.192	92.746	1.00
		29.57							
30		ATOM	18 CA	PRO	232	2.148	26.560	93.722	1.00
		26.98							
		ATOM	19 CB	PRO	232	1.277	25.633	94.590	1.00
		26.85							
35		ATOM	20 CG	PRO	232	0.321	25.045	93.658	1.00
		28.72							
		ATOM	21 C	PRO	232	3.410	25.870	93.180	1.00
		24.72							
		ATOM	22 O	PRO	232	3.411	25.249	92.127	1.00
		23.36							
40		ATOM	23 N	TRP	233	4.506	26.024	93.896	1.00
		25.48							
		ATOM	25 CA	TRP	233	5.793	25.473	93.470	1.00
		23.55							
45		ATOM	26 CB	TRP	233	6.878	25.761	94.535	1.00
		23.19							
		ATOM	27 CG	TRP	233	6.731	24.980	95.839	1.00
		22.23							
		ATOM	28 CD2	TRP	233	7.153	23.624	96.113	1.00
		21.73							
50		ATOM	29 CE2	TRP	233	6.845	23.357	97.461	1.00
		22.74							
		ATOM	30 CE3	TRP	233	7.762	22.615	95.347	1.00
		22.69							
55		ATOM	31 CD1	TRP	233	6.203	25.451	96.995	1.00
		20.43							
		ATOM	32 NE1	TRP	233	6.276	24.494	97.972	1.00
		22.28							
		ATOM	34 CZ2	TRP	233	7.113	22.112	98.076	1.00
		22.05							

	ATOM	35	CZ3	TRP	233	8.037	21.372	95.957	1.00
	20.26								
	ATOM	36	CH2	TRP	233	7.709	21.139	97.306	1.00
	21.81								
5	ATOM	37	C	TRP	233	5.775	23.976	93.115	1.00
	24.28								
	ATOM	38	O	TRP	233	6.474	23.542	92.186	1.00
	21.45								
10	ATOM	39	N	TRP	234	4.970	23.184	93.825	1.00
	23.01								
	ATOM	41	CA	TRP	234	4.914	21.748	93.540	1.00
	22.90								
	ATOM	42	CB	TRP	234	4.259	20.990	94.714	1.00
	20.97								
15	ATOM	43	CG	TRP	234	2.862	21.453	95.077	1.00
	19.50								
	ATOM	44	CD2	TRP	234	2.505	22.370	96.124	1.00
	18.76								
	ATOM	45	CE2	TRP	234	1.087	22.439	96.155	1.00
20	18.03								
	ATOM	46	CE3	TRP	234	3.240	23.139	97.028	1.00
	20.40								
	ATOM	47	CD1	TRP	234	1.685	21.028	94.523	1.00
	19.50								
25	ATOM	48	NE1	TRP	234	0.614	21.613	95.176	1.00
	18.89								
	ATOM	50	CZ2	TRP	234	0.395	23.241	97.060	1.00
	19.36								
	ATOM	51	CZ3	TRP	234	2.545	23.950	97.937	1.00
30	21.59								
	ATOM	52	CH2	TRP	234	1.132	23.988	97.942	1.00
	21.04								
	ATOM	53	C	TRP	234	4.257	21.405	92.192	1.00
	23.16								
35	ATOM	54	O	TRP	234	4.442	20.316	91.630	1.00
	21.44								
	ATOM	55	N	GLU	235	3.474	22.340	91.674	1.00
	24.87								
	ATOM	57	CA	GLU	235	2.809	22.169	90.381	1.00
40	27.37								
	ATOM	58	CB	GLU	235	1.348	22.612	90.486	1.00
	29.65								
	ATOM	59	CG	GLU	235	0.498	21.741	91.387	1.00
	31.86								
45	ATOM	60	CD	GLU	235	-0.983	22.049	91.281	1.00
	36.12								
	ATOM	61	OE1	GLU	235	-1.358	23.128	90.777	1.00
	37.74								
	ATOM	62	OE2	GLU	235	-1.783	21.197	91.705	1.00
50	37.52								
	ATOM	63	C	GLU	235	3.502	22.998	89.296	1.00
	28.36								
	ATOM	64	O	GLU	235	3.177	22.923	88.115	1.00
	30.14								
55	ATOM	65	N	ASP	236	4.431	23.833	89.736	1.00
	30.43								
	ATOM	67	CA	ASP	236	5.190	24.741	88.885	1.00
	31.53								

	ATOM 34.01	68	CB	ASP	236	6.014	25.637	89.822	1.00
	ATOM 35.33	69	CG	ASP	236	6.359	26.961	89.231	1.00
5	ATOM 37.56	70	OD1	ASP	236	5.874	27.298	88.124	1.00
	ATOM 36.77	71	OD2	ASP	236	7.123	27.677	89.902	1.00
10	ATOM 30.91	72	C	ASP	236	6.153	24.035	87.922	1.00
	ATOM 31.33	73	O	ASP	236	6.873	23.102	88.283	1.00
	ATOM 29.27	74	N	GLU	237	6.259	24.583	86.723	1.00
15	ATOM 28.93	76	CA	GLU	237	7.179	24.066	85.733	1.00
	ATOM 31.31	77	CB	GLU	237	6.734	24.482	84.324	1.00
20	ATOM 33.53	78	CG	GLU	237	6.005	25.839	84.237	1.00
	ATOM 36.26	79	CD	GLU	237	4.581	25.803	84.834	1.00
	ATOM 40.24	80	OE1	GLU	237	3.821	24.860	84.486	1.00
25	ATOM 35.72	81	OE2	GLU	237	4.233	26.674	85.672	1.00
	ATOM 29.26	82	C	GLU	237	8.603	24.578	85.993	1.00
30	ATOM 30.63	83	O	GLU	237	9.568	24.075	85.418	1.00
	ATOM 26.50	84	N	TRP	238	8.748	25.546	86.896	1.00
	ATOM 24.60	86	CA	TRP	238	10.048	26.122	87.169	1.00
35	ATOM 27.03	87	CB	TRP	238	9.965	27.639	87.065	1.00
	ATOM 28.24	88	CG	TRP	238	9.900	28.103	85.638	1.00
40	ATOM 30.29	89	CD2	TRP	238	8.744	28.547	84.944	1.00
	ATOM 30.52	90	CE2	TRP	238	9.134	28.864	83.621	1.00
	ATOM 29.46	91	CE3	TRP	238	7.405	28.704	85.313	1.00
45	ATOM 29.31	92	CD1	TRP	238	10.928	28.160	84.738	1.00
	ATOM 30.13	93	NE1	TRP	238	10.480	28.615	83.518	1.00
50	ATOM 30.01	95	CZ2	TRP	238	8.254	29.323	82.679	1.00
	ATOM 32.47	96	CZ3	TRP	238	6.532	29.155	84.385	1.00
	ATOM 33.11	97	CH2	TRP	238	6.950	29.465	83.073	1.00
55	ATOM 22.43	98	C	TRP	238	10.802	25.724	88.437	1.00
	ATOM 22.74	99	O	TRP	238	12.026	25.856	88.468	1.00

	ATOM 17.81	100	N	GLU	239	10.100	25.313	89.496	1.00
	ATOM 16.97	102	CA	GLU	239	10.786	24.906	90.714	1.00
5	ATOM 16.07	103	CB	GLU	239	9.840	24.545	91.854	1.00
	ATOM 18.77	104	CG	GLU	239	10.586	24.476	93.186	1.00
10	ATOM 19.99	105	CD	GLU	239	10.861	25.851	93.816	1.00
	ATOM 20.95	106	OE1	GLU	239	10.154	26.835	93.468	1.00
	ATOM 15.13	107	OE2	GLU	239	11.728	25.937	94.716	1.00
15	ATOM 16.51	108	C	GLU	239	11.687	23.726	90.414	1.00
	ATOM 16.73	109	O	GLU	239	11.341	22.831	89.641	1.00
20	ATOM 15.81	110	N	VAL	240	12.826	23.709	91.080	1.00
	ATOM 15.66	112	CA	VAL	240	13.813	22.696	90.842	1.00
	ATOM 18.62	113	CB	VAL	240	14.747	23.268	89.731	1.00
25	ATOM 15.18	114	CG1	VAL	240	16.140	23.706	90.292	1.00
	ATOM 16.45	115	CG2	VAL	240	14.747	22.424	88.517	1.00
30	ATOM 15.04	116	C	VAL	240	14.542	22.479	92.151	1.00
	ATOM 15.18	117	O	VAL	240	14.746	23.427	92.934	1.00
	ATOM 14.96	118	N	PRO	241	14.832	21.202	92.492	1.00
35	ATOM 12.45	119	CD	PRO	241	14.389	19.967	91.794	1.00
	ATOM 14.57	120	CA	PRO	241	15.556	20.883	93.738	1.00
40	ATOM 14.89	121	CB	PRO	241	15.730	19.351	93.637	1.00
	ATOM 13.42	122	CG	PRO	241	14.449	18.932	92.879	1.00
	ATOM 14.29	123	C	PRO	241	16.923	21.561	93.662	1.00
45	ATOM 13.35	124	O	PRO	241	17.539	21.562	92.615	1.00
	ATOM 14.32	125	N	ARG	242	17.388	22.157	94.752	1.00
50	ATOM 16.02	127	CA	ARG	242	18.667	22.826	94.736	1.00
	ATOM 17.39	128	CB	ARG	242	18.911	23.549	96.047	1.00
	ATOM 19.83	129	CG	ARG	242	19.954	24.664	95.915	1.00
55	ATOM 18.48	130	CD	ARG	242	20.484	25.107	97.287	1.00
	ATOM 18.30	131	NE	ARG	242	19.438	25.621	98.178	1.00

	ATOM 20.27	133	CZ	ARG	242	18.850	26.802	98.030	1.00
	ATOM 19.01	134	NH1	ARG	242	19.188	27.590	97.017	1.00
5	ATOM 19.75	137	NH2	ARG	242	17.928	27.199	98.887	1.00
	ATOM 17.15	140	C	ARG	242	19.852	21.889	94.423	1.00
10	ATOM 13.41	141	O	ARG	242	20.885	22.343	93.904	1.00
	ATOM 15.70	142	N	GLU	243	19.663	20.581	94.660	1.00
	ATOM 17.46	144	CA	GLU	243	20.690	19.555	94.391	1.00
15	ATOM 21.17	145	CB	GLU	243	20.219	18.157	94.879	1.00
	ATOM 26.41	146	CG	GLU	243	20.101	18.009	96.375	1.00
20	ATOM 29.87	147	CD	GLU	243	18.891	18.731	96.906	1.00
	ATOM 30.02	148	OE1	GLU	243	17.830	18.651	96.261	1.00
	ATOM 33.72	149	OE2	GLU	243	19.008	19.380	97.961	1.00
25	ATOM 15.84	150	C	GLU	243	21.019	19.437	92.896	1.00
	ATOM 13.74	151	O	GLU	243	22.073	18.886	92.509	1.00
30	ATOM 13.19	152	N	THR	244	20.105	19.899	92.045	1.00
	ATOM 12.84	154	CA	THR	244	20.340	19.829	90.618	1.00
	ATOM 12.93	155	CB	THR	244	19.062	20.179	89.836	1.00
35	ATOM 15.83	156	OG1	THR	244	18.614	21.497	90.225	1.00
	ATOM 12.75	158	CG2	THR	244	17.960	19.145	90.108	1.00
40	ATOM 12.09	159	C	THR	244	21.416	20.810	90.189	1.00
	ATOM 12.81	160	O	THR	244	21.919	20.756	89.082	1.00
	ATOM 13.36	161	N	LEU	245	21.827	21.686	91.093	1.00
45	ATOM 14.88	163	CA	LEU	245	22.766	22.728	90.715	1.00
	ATOM 14.94	164	CB	LEU	245	22.119	24.089	91.047	1.00
50	ATOM 15.32	165	CG	LEU	245	20.787	24.385	90.349	1.00
	ATOM 15.68	166	CD1	LEU	245	20.038	25.475	91.120	1.00
	ATOM 12.08	167	CD2	LEU	245	21.098	24.810	88.914	1.00
55	ATOM 15.36	168	C	LEU	245	24.130	22.735	91.350	1.00
	ATOM 17.11	169	O	LEU	245	24.268	22.590	92.555	1.00

5	ATOM 14.82	170	N	LYS	246	25.128	23.086	90.552	1.00
	ATOM 15.04	172	CA	LYS	246	26.475	23.179	91.087	1.00
	ATOM 15.31	173	CB	LYS	246	27.414	22.108	90.531	1.00
	ATOM 21.90	174	CG	LYS	246	28.807	22.160	91.193	1.00
	ATOM 27.51	175	CD	LYS	246	29.832	21.342	90.371	1.00
10	ATOM 31.22	176	CE	LYS	246	31.226	21.291	91.023	1.00
	ATOM 33.21	177	NZ	LYS	246	32.180	20.493	90.158	1.00
	ATOM 12.78	181	C	LYS	246	26.984	24.530	90.684	1.00
15	ATOM 14.00	182	O	LYS	246	27.078	24.829	89.501	1.00
	ATOM 11.60	183	N	LEU	247	27.237	25.370	91.675	0.60
	ATOM 10.36	185	CA	LEU	247	27.771	26.724	91.457	0.60
20	ATOM 10.23	186	CB	LEU	247	27.335	27.623	92.609	0.60
	ATOM 12.95	187	CG	LEU	247	25.898	28.184	92.519	0.60
	ATOM 14.45	188	CD1	LEU	247	24.840	27.109	92.272	0.60
25	ATOM 10.02	189	CD2	LEU	247	25.570	28.997	93.772	0.60
	ATOM 10.78	190	C	LEU	247	29.294	26.632	91.316	0.60
	ATOM 9.14	191	O	LEU	247	30.009	26.119	92.179	0.60
30	ATOM 14.86	192	N	VAL	248	29.796	27.083	90.169	1.00
	ATOM 17.81	194	CA	VAL	248	31.219	26.980	89.862	1.00
	ATOM 17.07	195	CB	VAL	248	31.431	26.331	88.473	1.00
35	ATOM 23.15	196	CG1	VAL	248	32.879	26.479	87.998	1.00
	ATOM 17.53	197	CG2	VAL	248	31.075	24.888	88.540	1.00
	ATOM 19.58	198	C	VAL	248	32.046	28.243	89.913	1.00
40	ATOM 21.76	199	O	VAL	248	33.172	28.227	90.405	1.00
	ATOM 19.48	200	N	GLU	249	31.512	29.350	89.423	1.00
	ATOM 20.59	202	CA	GLU	249	32.321	30.567	89.400	1.00
45	ATOM 21.97	203	CB	GLU	249	33.008	30.694	88.031	1.00
	ATOM 28.98	204	CG	GLU	249	33.795	32.009	87.893	1.00
	ATOM 29.46	205	CD	GLU	249	34.442	32.223	86.528	1.00



5	ATOM 33.62	206	OE1	GLU	249	34.138	31.491	85.563	1.00
	ATOM 31.65	207	OE2	GLU	249	35.240	33.166	86.412	1.00
	ATOM 20.64	208	C	GLU	249	31.461	31.798	89.645	1.00
	ATOM 18.22	209	O	GLU	249	30.462	32.002	88.978	1.00
10	ATOM 21.11	210	N	ARG	250	31.801	32.566	90.673	1.00
	ATOM 20.75	212	CA	ARG	250	31.062	33.781	90.949	1.00
	ATOM 22.14	213	CB	ARG	250	31.368	34.301	92.352	1.00
15	ATOM 25.03	214	CG	ARG	250	30.624	35.594	92.672	1.00
	ATOM 28.48	215	CD	ARG	250	30.841	36.072	94.117	1.00
	ATOM 30.65	216	NE	ARG	250	32.219	35.928	94.541	1.00
20	ATOM 36.29	218	CZ	ARG	250	32.668	36.245	95.748	1.00
	ATOM 38.58	219	NH1	ARG	250	31.833	36.738	96.666	1.00
	ATOM 36.92	222	NH2	ARG	250	33.960	36.072	96.039	1.00
25	ATOM 19.46	225	C	ARG	250	31.497	34.770	89.879	1.00
	ATOM 19.15	226	O	ARG	250	32.685	34.953	89.604	1.00
	ATOM 18.03	227	N	LEU	251	30.521	35.363	89.207	1.00
30	ATOM 17.17	229	CA	LEU	251	30.790	36.308	88.139	1.00
	ATOM 15.71	230	CB	LEU	251	29.872	36.026	86.942	1.00
	ATOM 16.81	231	CG	LEU	251	29.883	34.605	86.399	1.00
35	ATOM 15.28	232	CD1	LEU	251	28.811	34.429	85.350	1.00
	ATOM 14.89	233	CD2	LEU	251	31.259	34.297	85.808	1.00
	ATOM 19.19	234	C	LEU	251	30.544	37.724	88.609	1.00
40	ATOM 21.50	235	O	LEU	251	31.048	38.683	88.020	1.00
	ATOM 18.74	236	N	GLY	252	29.708	37.850	89.633	1.00
	ATOM 19.05	238	CA	GLY	252	29.352	39.152	90.150	1.00
45	ATOM 18.73	239	C	GLY	252	28.758	39.061	91.531	1.00
	ATOM 16.57	240	O	GLY	252	28.194	38.019	91.930	1.00
	ATOM 19.10	241	N	ALA	253	28.899	40.154	92.278	1.00
50	ATOM 19.46	243	CA	ALA	253	28.415	40.215	93.641	1.00

	ATOM 20.66	244	CB	ALA	253	29.460	39.647	94.584	1.00
	ATOM 19.86	245	C	ALA	253	28.095	41.666	94.010	1.00
5	ATOM 18.61	246	O	ALA	253	28.797	42.583	93.648	1.00
	ATOM 19.85	247	N	GLY	254	26.978	41.858	94.696	1.00
10	ATOM 20.71	249	CA	GLY	254	26.577	43.195	95.080	1.00
	ATOM 20.71	250	C	GLY	254	25.766	43.113	96.338	1.00
	ATOM 21.09	251	O	GLY	254	25.714	42.062	96.991	1.00
15	ATOM 21.69	252	N	GLN	255	25.081	44.211	96.627	1.00
	ATOM 22.87	254	CA	GLN	255	24.238	44.399	97.805	1.00
20	ATOM 24.44	255	CB	GLN	255	23.678	45.842	97.768	1.00
	ATOM 27.91	256	CG	GLN	255	23.066	46.343	99.090	1.00
	ATOM 28.66	257	CD	GLN	255	22.530	47.773	98.983	1.00
25	ATOM 32.42	258	OE1	GLN	255	21.679	48.167	99.756	1.00
	ATOM 28.11	259	NE2	GLN	255	23.013	48.531	98.005	1.00
30	ATOM 22.21	262	C	GLN	255	23.070	43.417	97.932	1.00
	ATOM 20.67	263	O	GLN	255	22.684	42.998	99.038	1.00
	ATOM 22.10	264	N	PHE	256	22.492	43.044	96.798	1.00
35	ATOM 22.26	266	CA	PHE	256	21.330	42.141	96.832	1.00
	ATOM 22.35	267	CB	PHE	256	20.233	42.692	95.934	1.00
40	ATOM 22.39	268	CG	PHE	256	19.919	44.131	96.211	1.00
	ATOM 20.34	269	CD1	PHE	256	19.430	44.503	97.450	1.00
	ATOM 22.22	270	CD2	PHE	256	20.225	45.119	95.277	1.00
45	ATOM 22.81	271	CE1	PHE	256	19.261	45.827	97.774	1.00
	ATOM 22.65	272	CE2	PHE	256	20.062	46.462	95.597	1.00
50	ATOM 22.73	273	CZ	PHE	256	19.585	46.820	96.841	1.00
	ATOM 21.89	274	C	PHE	256	21.586	40.667	96.529	1.00
	ATOM 19.84	275	O	PHE	256	20.677	39.852	96.579	1.00
55	ATOM 21.14	276	N	GLY	257	22.848	40.312	96.294	1.00
	ATOM 21.14	278	CA	GLY	257	23.146	38.924	95.985	1.00

	ATOM 20.30	279	C	GLY	257	24.351	38.728	95.090	1.00
	ATOM 18.68	280	O	GLY	257	25.188	39.643	94.922	1.00
5	ATOM 17.66	281	N	GLU	258	24.404	37.561	94.445	1.00
	ATOM 16.20	283	CA	GLU	258	25.517	37.227	93.589	1.00
10	ATOM 18.61	284	CB	GLU	258	26.463	36.241	94.307	1.00
	ATOM 24.08	285	CG	GLU	258	26.931	36.680	95.701	1.00
	ATOM 29.32	286	CD	GLU	258	27.827	35.638	96.385	1.00
15	ATOM 30.55	287	OE1	GLU	258	27.455	34.436	96.441	1.00
	ATOM 32.64	288	OE2	GLU	258	28.919	36.011	96.858	1.00
20	ATOM 15.13	289	C	GLU	258	25.009	36.582	92.317	1.00
	ATOM 13.97	290	O	GLU	258	23.854	36.183	92.224	1.00
	ATOM 11.50	291	N	VAL	259	25.878	36.545	91.322	0.77
25	ATOM 11.87	293	CA	VAL	259	25.565	35.918	90.054	0.77
	ATOM 10.59	294	CB	VAL	259	25.458	36.944	88.918	0.77
30	ATOM 11.39	295	CG1	VAL	259	25.195	36.196	87.577	0.77
	ATOM 12.35	296	CG2	VAL	259	24.300	37.950	89.231	0.77
	ATOM 11.07	297	C	VAL	259	26.721	34.951	89.791	0.77
35	ATOM 7.65	298	O	VAL	259	27.878	35.340	89.806	0.77
	ATOM 12.75	299	N	TRP	260	26.374	33.688	89.570	1.00
40	ATOM 12.57	301	CA	TRP	260	27.355	32.634	89.339	1.00
	ATOM 13.64	302	CB	TRP	260	27.223	31.564	90.422	1.00
	ATOM 15.49	303	CG	TRP	260	27.624	31.962	91.839	1.00
45	ATOM 16.17	304	CD2	TRP	260	28.768	31.510	92.549	1.00
	ATOM 19.28	305	CE2	TRP	260	28.693	32.051	93.849	1.00
50	ATOM 18.93	306	CE3	TRP	260	29.857	30.699	92.215	1.00
	ATOM 13.42	307	CD1	TRP	260	26.917	32.752	92.710	1.00
	ATOM 16.08	308	NE1	TRP	260	27.547	32.806	93.911	1.00
55	ATOM 19.80	310	CZ2	TRP	260	29.664	31.811	94.816	1.00
	ATOM 21.11	311	CZ3	TRP	260	30.836	30.463	93.179	1.00

	ATOM 20.39	312	CH2	TRP	260	30.733	31.017	94.463	1.00
	ATOM 14.42	313	C	TRP	260	27.110	31.896	88.057	1.00
5	ATOM 12.42	314	O	TRP	260	25.977	31.874	87.544	1.00
	ATOM 12.57	315	N	MET	261	28.187	31.306	87.534	1.00
10	ATOM 14.05	317	CA	MET	261	28.125	30.398	86.383	1.00
	ATOM 14.46	318	CB	MET	261	29.426	30.446	85.540	1.00
	ATOM 17.51	319	CG	MET	261	29.467	29.449	84.368	1.00
15	ATOM 18.15	320	SD	MET	261	29.909	27.732	84.824	1.00
	ATOM 21.26	321	CE	MET	261	31.650	27.952	84.794	1.00
20	ATOM 12.89	322	C	MET	261	28.058	29.049	87.114	1.00
	ATOM 12.76	323	O	MET	261	28.746	28.843	88.098	1.00
	ATOM 12.57	324	N	GLY	262	27.192	28.148	86.669	1.00
25	ATOM 12.10	326	CA	GLY	262	27.092	26.863	87.334	1.00
	ATOM 10.09	327	C	GLY	262	26.605	25.802	86.361	1.00
30	ATOM 10.85	328	O	GLY	262	26.539	26.068	85.161	1.00
	ATOM 9.97	329	N	TYR	263	26.312	24.595	86.840	1.00
	ATOM 8.96	331	CA	TYR	263	25.798	23.571	85.929	1.00
35	ATOM 12.15	332	CB	TYR	263	26.803	22.422	85.749	1.00
	ATOM 15.43	333	CG	TYR	263	27.970	22.824	84.895	1.00
40	ATOM 17.03	334	CD1	TYR	263	27.909	22.695	83.507	1.00
	ATOM 19.78	335	CE1	TYR	263	28.929	23.120	82.711	1.00
	ATOM 18.36	336	CD2	TYR	263	29.105	23.381	85.459	1.00
45	ATOM 19.33	337	CE2	TYR	263	30.149	23.816	84.667	1.00
	ATOM 22.04	338	CZ	TYR	263	30.057	23.676	83.295	1.00
50	ATOM 22.57	339	OH	TYR	263	31.100	24.070	82.483	1.00
	ATOM 8.52	341	C	TYR	263	24.518	23.001	86.512	1.00
	ATOM 9.40	342	O	TYR	263	24.410	22.801	87.719	1.00
55	ATOM 8.93	343	N	TYR	264	23.567	22.702	85.639	1.00
	ATOM 10.98	345	CA	TYR	264	22.288	22.121	86.049	1.00

	ATOM	346	CB	TYR	264	21.113	22.820	85.320	1.00
	11.56								
	ATOM	347	CG	TYR	264	19.774	22.108	85.499	1.00
	11.28								
5	ATOM	348	CD1	TYR	264	19.069	22.217	86.688	1.00
	9.42								
	ATOM	349	CE1	TYR	264	17.861	21.577	86.872	1.00
	15.83								
10	ATOM	350	CD2	TYR	264	19.244	21.331	84.482	1.00
	14.76								
	ATOM	351	CE2	TYR	264	18.028	20.658	84.641	1.00
	16.70								
	ATOM	352	CZ	TYR	264	17.342	20.787	85.851	1.00
	16.43								
15	ATOM	353	OH	TYR	264	16.194	20.076	86.066	1.00
	16.99								
	ATOM	355	C	TYR	264	22.362	20.632	85.640	1.00
	9.72								
20	ATOM	356	O	TYR	264	22.630	20.326	84.523	1.00
	8.37								
	ATOM	357	N	ASN	265	22.131	19.742	86.583	1.00
	12.41								
	ATOM	359	CA	ASN	265	22.168	18.281	86.351	1.00
	15.00								
25	ATOM	360	CB	ASN	265	20.931	17.835	85.542	1.00
	14.45								
	ATOM	361	CG	ASN	265	19.697	17.631	86.409	1.00
	16.46								
30	ATOM	362	OD1	ASN	265	19.684	17.960	87.593	1.00
	18.43								
	ATOM	363	ND2	ASN	265	18.646	17.085	85.811	1.00
	19.57								
	ATOM	366	C	ASN	265	23.480	17.833	85.671	1.00
	13.32								
35	ATOM	367	O	ASN	265	23.479	17.112	84.669	1.00
	13.22								
	ATOM	368	N	GLY	266	24.576	18.441	86.134	1.00
	13.42								
40	ATOM	370	CA	GLY	266	25.903	18.157	85.627	1.00
	10.69								
	ATOM	371	C	GLY	266	26.370	18.683	84.291	1.00
	10.57								
	ATOM	372	O	GLY	266	27.497	19.190	84.188	1.00
	13.73								
45	ATOM	373	N	HIS	267	25.524	18.672	83.278	0.49
	6.58								
	ATOM	375	CA	HIS	267	25.959	19.032	81.930	0.49
	4.52								
50	ATOM	376	CB	HIS	267	25.519	17.906	80.982	0.49
	2.00								
	ATOM	377	CG	HIS	267	26.142	16.579	81.298	0.49
	2.01								
	ATOM	378	CD2	HIS	267	27.443	16.220	81.373	0.49
	2.00								
55	ATOM	379	ND1	HIS	267	25.404	15.465	81.622	0.49
	3.59								
	ATOM	381	CE1	HIS	267	26.233	14.460	81.887	0.49
	2.00								

	ATOM 4.45	382	NE2	HIS	267	27.465	14.892	81.741	0.49
	ATOM 4.81	384	C	HIS	267	25.565	20.347	81.277	0.49
5	ATOM 2.00	385	O	HIS	267	26.133	20.755	80.290	0.49
	ATOM 8.43	386	N	THR	268	24.595	21.015	81.863	1.00
10	ATOM 9.66	388	CA	THR	268	24.045	22.241	81.271	1.00
	ATOM 9.51	389	CB	THR	268	22.495	22.190	81.312	1.00
	ATOM 11.36	390	OG1	THR	268	22.064	21.009	80.609	1.00
15	ATOM 7.84	392	CG2	THR	268	21.869	23.479	80.588	1.00
	ATOM 10.26	393	C	THR	268	24.508	23.484	81.978	1.00
20	ATOM 8.95	394	O	THR	268	24.201	23.690	83.109	1.00
	ATOM 8.44	395	N	LYS	269	25.226	24.322	81.256	1.00
	ATOM 10.73	397	CA	LYS	269	25.758	25.539	81.820	1.00
25	ATOM 14.43	398	CB	LYS	269	26.793	26.085	80.844	1.00
	ATOM 20.68	399	CG	LYS	269	27.857	26.927	81.456	1.00
30	ATOM 22.81	400	CD	LYS	269	28.940	27.198	80.418	1.00
	ATOM 25.97	401	CE	LYS	269	30.165	27.822	81.080	1.00
	ATOM 28.11	402	NZ	LYS	269	31.365	27.979	80.165	1.00
35	ATOM 9.94	406	C	LYS	269	24.610	26.538	82.010	1.00
	ATOM 9.80	407	O	LYS	269	23.766	26.713	81.133	1.00
40	ATOM 9.86	408	N	VAL	270	24.565	27.161	83.184	1.00
	ATOM 10.05	410	CA	VAL	270	23.523	28.127	83.507	1.00
	ATOM 9.92	411	CB	VAL	270	22.407	27.471	84.453	1.00
45	ATOM 7.56	412	CG1	VAL	270	21.595	26.382	83.716	1.00
	ATOM 7.92	413	CG2	VAL	270	23.040	26.947	85.730	1.00
50	ATOM 8.92	414	C	VAL	270	24.112	29.285	84.304	1.00
	ATOM 6.48	415	O	VAL	270	25.244	29.215	84.820	1.00
	ATOM 9.98	416	N	ALA	271	23.347	30.375	84.386	1.00
55	ATOM 6.96	418	CA	ALA	271	23.721	31.526	85.230	1.00
	ATOM 12.05	419	CB	ALA	271	23.429	32.850	84.490	1.00

	ATOM 8.72	420	C	ALA	271	22.781	31.390	86.436	1.00
	ATOM 8.81	421	O	ALA	271	21.607	31.007	86.300	1.00
5	ATOM 9.04	422	N	VAL	272	23.283	31.634	87.640	1.00
	ATOM 10.61	424	CA	VAL	272	22.452	31.523	88.852	1.00
10	ATOM 12.04	425	CB	VAL	272	22.906	30.305	89.770	1.00
	ATOM 10.75	426	CG1	VAL	272	22.058	30.206	91.013	1.00
	ATOM 8.55	427	CG2	VAL	272	22.791	28.965	88.987	1.00
15	ATOM 13.45	428	C	VAL	272	22.586	32.866	89.624	1.00
	ATOM 14.83	429	O	VAL	272	23.720	33.334	89.901	1.00
20	ATOM 12.70	430	N	LYS	273	21.452	33.535	89.854	1.00
	ATOM 12.28	432	CA	LYS	273	21.409	34.801	90.618	1.00
	ATOM 13.97	433	CB	LYS	273	20.508	35.828	89.921	1.00
25	ATOM 17.88	434	CG	LYS	273	20.492	37.206	90.606	1.00
	ATOM 20.07	435	CD	LYS	273	19.981	38.243	89.611	1.00
30	ATOM 19.77	436	CE	LYS	273	19.348	39.440	90.304	1.00
	ATOM 18.18	437	NZ	LYS	273	18.869	40.401	89.268	1.00
	ATOM 8.80	441	C	LYS	273	20.840	34.426	91.959	1.00
35	ATOM 10.19	442	O	LYS	273	19.733	33.857	92.030	1.00
	ATOM 6.09	443	N	SER	274	21.585	34.687	93.022	0.65
40	ATOM 8.59	445	CA	SER	274	21.164	34.319	94.360	0.65
	ATOM 10.55	446	CB	SER	274	22.258	33.490	95.032	0.65
	ATOM 10.38	447	OG	SER	274	23.470	34.234	95.063	0.65
45	ATOM 10.30	449	C	SER	274	20.891	35.535	95.198	0.65
	ATOM 5.65	450	O	SER	274	21.649	36.495	95.187	0.65
50	ATOM 15.24	451	N	LEU	275	19.804	35.465	95.967	1.00
	ATOM 17.33	453	CA	LEU	275	19.389	36.573	96.821	1.00
	ATOM 17.49	454	CB	LEU	275	17.864	36.490	97.091	1.00
55	ATOM 19.44	455	CG	LEU	275	17.236	37.430	98.139	1.00
	ATOM 18.21	456	CD1	LEU	275	17.369	38.895	97.688	1.00

	ATOM	457	CD2	LEU	275	15.735	37.045	98.373	1.00
	19.11								
	ATOM	458	C	LEU	275	20.118	36.561	98.149	1.00
	19.37								
5	ATOM	459	O	LEU	275	20.134	35.559	98.860	1.00
	21.32								
	ATOM	460	N	LYS	276	20.707	37.699	98.496	1.00
	21.66								
10	ATOM	462	CA	LYS	276	21.371	37.849	99.781	1.00
	23.47								
	ATOM	463	CB	LYS	276	22.256	39.097	99.809	1.00
	22.50								
	ATOM	464	CG	LYS	276	22.803	39.370	101.182	1.00
	25.85								
15	ATOM	465	CD	LYS	276	23.761	40.521	101.196	1.00
	30.61								
	ATOM	466	CE	LYS	276	24.215	40.799	102.616	1.00
	32.42								
	ATOM	467	NZ	LYS	276	25.396	41.724	102.623	1.00
	36.15								
20	ATOM	471	C	LYS	276	20.240	38.032	100.774	1.00
	22.87								
	ATOM	472	O	LYS	276	19.562	39.024	100.744	1.00
	22.78								
25	ATOM	473	N	ALA	277	20.035	37.047	101.637	1.00
	26.43								
	ATOM	475	CA	ALA	277	18.964	37.093	102.631	1.00
	29.92								
	ATOM	476	CB	ALA	277	19.031	35.875	103.560	1.00
	29.37								
30	ATOM	477	C	ALA	277	18.984	38.383	103.449	1.00
	29.68								
	ATOM	478	O	ALA	277	20.035	38.841	103.908	1.00
	32.15								
35	ATOM	479	N	GLY	278	17.802	38.981	103.586	1.00
	29.88								
	ATOM	481	CA	GLY	278	17.646	40.212	104.332	1.00
	27.48								
	ATOM	482	C	GLY	278	17.983	41.489	103.571	1.00
	27.11								
40	ATOM	483	O	GLY	278	17.649	42.563	104.050	1.00
	26.26								
	ATOM	484	N	SER	279	18.621	41.396	102.399	1.00
	24.86								
45	ATOM	486	CA	SER	279	18.972	42.600	101.640	1.00
	22.90								
	ATOM	487	CB	SER	279	20.068	42.286	100.630	1.00
	22.71								
	ATOM	488	OG	SER	279	19.618	41.387	99.616	1.00
	20.28								
50	ATOM	490	C	SER	279	17.784	43.230	100.933	1.00
	23.27								
	ATOM	491	O	SER	279	17.783	44.413	100.562	1.00
	23.91								
55	ATOM	492	N	MET	280	16.762	42.413	100.711	1.00
	21.45								
	ATOM	494	CA	MET	280	15.561	42.865	100.034	1.00
	19.30								



	ATOM 20.90	495	CB	MET	280	15.819	43.181	98.549	1.00
	ATOM 19.17	496	CG	MET	280	16.054	41.973	97.620	1.00
5	ATOM 21.32	497	SD	MET	280	16.469	42.390	95.878	1.00
	ATOM 16.33	498	CE	MET	280	14.834	42.654	95.202	1.00
10	ATOM 19.63	499	C	MET	280	14.514	41.760	100.192	1.00
	ATOM 18.67	500	O	MET	280	14.783	40.649	100.686	1.00
	ATOM 16.87	501	N	SER	281	13.290	42.111	99.850	1.00
15	ATOM 17.53	503	CA	SER	281	12.181	41.205	99.953	1.00
	ATOM 18.68	504	CB	SER	281	10.902	41.995	99.604	1.00
20	ATOM 16.36	505	OG	SER	281	9.840	41.144	99.299	1.00
	ATOM 13.43	507	C	SER	281	12.304	40.006	99.010	1.00
	ATOM 16.07	508	O	SER	281	12.602	40.179	97.814	1.00
25	ATOM 10.91	509	N	PRO	282	12.052	38.791	99.518	0.51
	ATOM 10.92	510	CD	PRO	282	11.934	38.421	100.939	0.51
30	ATOM 10.05	511	CA	PRO	282	12.131	37.601	98.674	0.51
	ATOM 9.74	512	CB	PRO	282	11.791	36.460	99.646	0.51
	ATOM 10.72	513	CG	PRO	282	12.321	36.934	100.922	0.51
35	ATOM 9.74	514	C	PRO	282	11.079	37.742	97.567	0.51
	ATOM 5.34	515	O	PRO	282	11.306	37.355	96.424	0.51
40	ATOM 12.36	516	N	ASP	283	9.929	38.339	97.913	1.00
	ATOM 12.64	518	CA	ASP	283	8.872	38.566	96.909	1.00
	ATOM 14.44	519	CB	ASP	283	7.597	39.111	97.536	1.00
45	ATOM 19.62	520	CG	ASP	283	6.486	39.284	96.498	1.00
	ATOM 20.34	521	OD1	ASP	283	6.159	38.285	95.831	1.00
50	ATOM 17.83	522	OD2	ASP	283	5.951	40.398	96.294	1.00
	ATOM 11.41	523	C	ASP	283	9.338	39.546	95.839	1.00
	ATOM 10.24	524	O	ASP	283	9.038	39.402	94.664	1.00
55	ATOM 11.86	525	N	ALA	284	10.071	40.579	96.244	1.00
	ATOM 11.50	527	CA	ALA	284	10.583	41.563	95.269	1.00

	ATOM 14.90	528	CB	ALA	284	11.302	42.729	96.023	1.00
	ATOM 9.71	529	C	ALA	284	11.599	40.856	94.365	1.00
5	ATOM 12.77	530	O	ALA	284	11.616	41.001	93.160	1.00
	ATOM 12.36	531	N	PHE	285	12.482	40.081	94.968	1.00
10	ATOM 11.93	533	CA	PHE	285	13.497	39.363	94.170	1.00
	ATOM 12.00	534	CB	PHE	285	14.400	38.560	95.107	1.00
	ATOM 11.48	535	CG	PHE	285	15.470	37.766	94.398	1.00
15	ATOM 11.61	536	CD1	PHE	285	16.658	38.372	94.029	1.00
	ATOM 12.64	537	CD2	PHE	285	15.306	36.366	94.188	1.00
20	ATOM 15.09	538	CE1	PHE	285	17.723	37.603	93.469	1.00
	ATOM 11.94	539	CE2	PHE	285	16.342	35.582	93.634	1.00
	ATOM 13.87	540	CZ	PHE	285	17.550	36.193	93.272	1.00
25	ATOM 12.72	541	C	PHE	285	12.861	38.440	93.113	1.00
	ATOM 13.64	542	O	PHE	285	13.187	38.502	91.937	1.00
30	ATOM 12.47	543	N	LEU	286	11.889	37.631	93.531	1.00
	ATOM 13.16	545	CA	LEU	286	11.239	36.697	92.631	1.00
	ATOM 10.98	546	CB	LEU	286	10.452	35.655	93.439	1.00
35	ATOM 11.81	547	CG	LEU	286	11.406	34.705	94.189	1.00
	ATOM 11.78	548	CD1	LEU	286	10.686	33.906	95.289	1.00
40	ATOM 11.79	549	CD2	LEU	286	12.074	33.779	93.168	1.00
	ATOM 13.30	550	C	LEU	286	10.373	37.335	91.549	1.00
	ATOM 13.69	551	O	LEU	286	10.099	36.721	90.501	1.00
45	ATOM 14.22	552	N	ALA	287	9.980	38.595	91.753	1.00
	ATOM 12.79	554	CA	ALA	287	9.164	39.275	90.744	1.00
50	ATOM 14.01	555	CB	ALA	287	8.747	40.716	91.227	1.00
	ATOM 12.05	556	C	ALA	287	9.877	39.327	89.413	1.00
	ATOM 14.50	557	O	ALA	287	9.263	39.236	88.375	1.00
55	ATOM 13.61	558	N	GLU	288	11.211	39.367	89.437	1.00
	ATOM 12.81	560	CA	GLU	288	11.989	39.383	88.200	1.00

	ATOM 13.21	561	CB	GLU	288	13.486	39.460	88.526	1.00
	ATOM 16.97	562	CG	GLU	288	14.424	39.430	87.310	1.00
5	ATOM 18.73	563	CD	GLU	288	15.909	39.764	87.655	1.00
	ATOM 20.30	564	OE1	GLU	288	16.279	39.835	88.824	1.00
10	ATOM 21.91	565	OE2	GLU	288	16.735	39.934	86.741	1.00
	ATOM 11.20	566	C	GLU	288	11.732	38.075	87.439	1.00
	ATOM 11.74	567	O	GLU	288	11.424	38.063	86.263	1.00
15	ATOM 10.96	568	N	ALA	289	11.813	36.962	88.169	1.00
	ATOM 9.73	570	CA	ALA	289	11.597	35.633	87.566	1.00
20	ATOM 8.45	571	CB	ALA	289	11.872	34.542	88.603	1.00
	ATOM 8.84	572	C	ALA	289	10.166	35.530	87.033	1.00
	ATOM 9.57	573	O	ALA	289	9.934	35.052	85.914	1.00
25	ATOM 10.45	574	N	ASN	290	9.198	35.999	87.827	1.00
	ATOM 14.12	576	CA	ASN	290	7.800	35.953	87.404	1.00
30	ATOM 16.66	577	CB	ASN	290	6.876	36.488	88.520	1.00
	ATOM 21.59	578	CG	ASN	290	6.762	35.513	89.712	1.00
	ATOM 23.55	579	OD1	ASN	290	6.541	35.926	90.856	1.00
35	ATOM 22.69	580	ND2	ASN	290	6.905	34.219	89.440	1.00
	ATOM 14.97	583	C	ASN	290	7.584	36.726	86.085	1.00
40	ATOM 13.37	584	O	ASN	290	6.789	36.320	85.222	1.00
	ATOM 17.47	585	N	LEU	291	8.285	37.854	85.928	1.00
	ATOM 17.29	587	CA	LEU	291	8.199	38.648	84.697	1.00
45	ATOM 20.19	588	CB	LEU	291	9.003	39.971	84.821	1.00
	ATOM 24.74	589	CG	LEU	291	8.472	41.392	85.179	1.00
50	ATOM 22.61	590	CD1	LEU	291	6.997	41.521	84.889	1.00
	ATOM 22.09	591	CD2	LEU	291	8.806	41.810	86.644	1.00
	ATOM 16.73	592	C	LEU	291	8.778	37.817	83.517	1.00
55	ATOM 15.61	593	O	LEU	291	8.221	37.803	82.417	1.00
	ATOM 13.77	594	N	MET	292	9.939	37.179	83.730	1.00

	ATOM	596	CA	MET	292	10.590	36.381	82.675	1.00
	13.57								
	ATOM	597	CB	MET	292	11.966	35.896	83.117	1.00
	13.10								
5	ATOM	598	CG	MET	292	12.909	37.044	83.430	1.00
	14.50								
	ATOM	599	SD	MET	292	14.439	36.550	84.164	1.00
	15.15								
10	ATOM	600	CE	MET	292	15.202	35.872	82.775	1.00
	9.75								
	ATOM	601	C	MET	292	9.714	35.228	82.178	1.00
	14.48								
	ATOM	602	O	MET	292	9.803	34.854	81.031	1.00
	14.30								
15	ATOM	603	N	LYS	293	8.866	34.686	83.058	1.00
	15.91								
	ATOM	605	CA	LYS	293	7.902	33.660	82.670	1.00
	19.35								
20	ATOM	606	CB	LYS	293	7.013	33.269	83.859	1.00
	18.02								
	ATOM	607	CG	LYS	293	7.721	32.508	84.966	1.00
	19.31								
	ATOM	608	CD	LYS	293	6.813	32.324	86.197	1.00
	21.14								
25	ATOM	609	CE	LYS	293	7.610	31.749	87.383	1.00
	23.15								
	ATOM	610	NZ	LYS	293	6.770	31.524	88.623	1.00
	23.01								
30	ATOM	614	C	LYS	293	6.978	34.180	81.547	1.00
	20.23								
	ATOM	615	O	LYS	293	6.643	33.444	80.647	1.00
	22.05								
	ATOM	616	N	GLN	294	6.639	35.471	81.571	1.00
	22.80								
35	ATOM	618	CA	GLN	294	5.734	36.086	80.563	1.00
	23.80								
	ATOM	619	CB	GLN	294	4.932	37.226	81.188	1.00
	23.71								
40	ATOM	620	CG	GLN	294	4.115	36.880	82.410	1.00
	25.12								
	ATOM	621	CD	GLN	294	3.137	35.733	82.183	1.00
	25.84								
	ATOM	622	OE1	GLN	294	2.564	35.563	81.087	1.00
	27.13								
45	ATOM	623	NE2	GLN	294	2.908	34.962	83.232	1.00
	25.33								
	ATOM	626	C	GLN	294	6.413	36.688	79.333	1.00
	24.50								
50	ATOM	627	O	GLN	294	5.755	37.279	78.443	1.00
	24.11								
	ATOM	628	N	LEU	295	7.738	36.618	79.306	1.00
	21.49								
	ATOM	630	CA	LEU	295	8.487	37.197	78.219	1.00
	19.69								
55	ATOM	631	CB	LEU	295	9.192	38.475	78.711	1.00
	19.08								
	ATOM	632	CG	LEU	295	8.308	39.673	78.994	1.00
	18.05								

	ATOM	633	CD1	LEU	295	9.091	40.766	79.704	1.00
	20.60								
	ATOM	634	CD2	LEU	295	7.790	40.127	77.657	1.00
	16.99								
5	ATOM	635	C	LEU	295	9.500	36.220	77.709	1.00
	18.25								
	ATOM	636	O	LEU	295	10.698	36.338	77.975	1.00
	19.62								
10	ATOM	637	N	GLN	296	9.035	35.260	76.928	1.00
	17.39								
	ATOM	639	CA	GLN	296	9.951	34.250	76.416	1.00
	18.14								
	ATOM	640	CB	GLN	296	9.420	32.832	76.700	1.00
	15.45								
15	ATOM	641	CG	GLN	296	9.288	32.539	78.179	1.00
	19.02								
	ATOM	642	CD	GLN	296	8.794	31.115	78.413	1.00
	20.14								
20	ATOM	643	OE1	GLN	296	9.206	30.199	77.725	1.00
	22.06								
	ATOM	644	NE2	GLN	296	7.912	30.942	79.361	1.00
	20.10								
	ATOM	647	C	GLN	296	10.118	34.452	74.943	1.00
	15.64								
25	ATOM	648	O	GLN	296	9.150	34.458	74.215	1.00
	15.34								
	ATOM	649	N	HIS	297	11.372	34.551	74.509	1.00
	14.27								
30	ATOM	651	CA	HIS	297	11.688	34.765	73.101	1.00
	11.92								
	ATOM	652	CB	HIS	297	11.370	36.225	72.753	1.00
	10.95								
	ATOM	653	CG	HIS	297	11.495	36.546	71.297	1.00
	10.37								
35	ATOM	654	CD2	HIS	297	10.556	36.624	70.319	1.00
	12.15								
	ATOM	655	ND1	HIS	297	12.695	36.842	70.695	1.00
	11.35								
40	ATOM	657	CE1	HIS	297	12.501	37.097	69.409	1.00
	13.18								
	ATOM	658	NE2	HIS	297	11.204	36.963	69.158	1.00
	11.54								
	ATOM	660	C	HIS	297	13.173	34.498	72.928	1.00
	11.34								
45	ATOM	661	O	HIS	297	13.933	34.717	73.884	1.00
	9.90								
	ATOM	662	N	GLN	298	13.604	34.113	71.716	1.00
	11.48								
50	ATOM	664	CA	GLN	298	15.036	33.841	71.439	1.00
	12.13								
	ATOM	665	CB	GLN	298	15.289	33.479	69.963	1.00
	13.49								
	ATOM	666	CG	GLN	298	14.906	32.112	69.500	1.00
	15.33								
55	ATOM	667	CD	GLN	298	15.696	30.957	70.148	1.00
	15.54								
	ATOM	668	OE1	GLN	298	16.995	30.917	70.199	1.00
	16.95								

	ATOM 12.02	669	NE2	GLN	298	14.949	29.994	70.610	1.00
	ATOM 11.32	672	C	GLN	298	15.956	35.039	71.743	1.00
5	ATOM 11.14	673	O	GLN	298	17.119	34.891	72.078	1.00
	ATOM 10.16	674	N	ARG	299	15.412	36.245	71.641	1.00
10	ATOM 9.08	676	CA	ARG	299	16.194	37.454	71.883	1.00
	ATOM 8.03	677	CB	ARG	299	15.738	38.560	70.916	1.00
	ATOM 3.63	678	CG	ARG	299	15.814	38.211	69.431	1.00
15	ATOM 3.23	679	CD	ARG	299	17.162	38.557	68.807	1.00
	ATOM 6.82	680	NE	ARG	299	18.321	37.992	69.520	1.00
20	ATOM 8.67	682	CZ	ARG	299	18.788	36.758	69.370	1.00
	ATOM 8.24	683	NH1	ARG	299	18.174	35.912	68.556	1.00
	ATOM 8.32	686	NH2	ARG	299	19.910	36.390	70.007	1.00
25	ATOM 7.13	689	C	ARG	299	16.181	37.986	73.310	1.00
	ATOM 9.74	690	O	ARG	299	16.643	39.079	73.549	1.00
30	ATOM 6.11	691	N	LEU	300	15.561	37.269	74.242	1.00
	ATOM 6.01	693	CA	LEU	300	15.522	37.665	75.629	1.00
	ATOM 7.06	694	CB	LEU	300	14.069	37.890	76.154	1.00
35	ATOM 7.90	695	CG	LEU	300	13.323	39.211	75.813	1.00
	ATOM 4.75	696	CD1	LEU	300	13.413	39.508	74.322	1.00
40	ATOM 7.42	697	CD2	LEU	300	11.827	39.102	76.265	1.00
	ATOM 8.93	698	C	LEU	300	16.142	36.506	76.406	1.00
	ATOM 6.41	699	O	LEU	300	15.848	35.338	76.102	1.00
45	ATOM 6.55	700	N	VAL	301	16.966	36.841	77.410	1.00
	ATOM 8.81	702	CA	VAL	301	17.619	35.855	78.245	1.00
50	ATOM 8.90	703	CB	VAL	301	18.539	36.531	79.288	1.00
	ATOM 12.65	704	CG1	VAL	301	19.124	35.519	80.295	1.00
	ATOM 9.85	705	CG2	VAL	301	19.711	37.185	78.520	1.00
55	ATOM 9.15	706	C	VAL	301	16.495	35.009	78.820	1.00
	ATOM 8.93	707	O	VAL	301	15.511	35.520	79.376	1.00

	ATOM 8.85	708	N	ARG	302	16.646	33.690	78.681	1.00
	ATOM 10.40	710	CA	ARG	302	15.573	32.768	79.119	1.00
5	ATOM 12.40	711	CB	ARG	302	15.536	31.582	78.143	1.00
	ATOM 23.68	712	CG	ARG	302	14.164	30.941	77.970	1.00
10	ATOM 30.77	713	CD	ARG	302	14.140	29.714	78.754	1.00
	ATOM 38.30	714	NE	ARG	302	13.444	28.625	78.073	1.00
	ATOM 40.51	716	CZ	ARG	302	13.393	27.385	78.542	1.00
15	ATOM 39.82	717	NH1	ARG	302	13.996	27.096	79.696	1.00
	ATOM 41.42	720	NH2	ARG	302	12.752	26.447	77.855	1.00
	ATOM 8.42	723	C	ARG	302	15.580	32.270	80.538	1.00
20	ATOM 7.98	724	O	ARG	302	16.607	31.798	81.060	1.00
	ATOM 5.71	725	N	LEU	303	14.422	32.334	81.200	1.00
25	ATOM 8.28	727	CA	LEU	303	14.349	31.803	82.563	1.00
	ATOM 6.95	728	CB	LEU	303	13.025	32.163	83.194	1.00
	ATOM 8.61	729	CG	LEU	303	12.808	31.608	84.595	1.00
30	ATOM 5.11	730	CD1	LEU	303	13.812	32.220	85.529	1.00
	ATOM 7.06	731	CD2	LEU	303	11.355	31.903	85.056	1.00
35	ATOM 10.39	732	C	LEU	303	14.373	30.254	82.446	1.00
	ATOM 9.86	733	O	LEU	303	13.822	29.694	81.516	1.00
40	ATOM 11.01	734	N	TYR	304	15.121	29.592	83.313	1.00
	ATOM 12.82	736	CA	TYR	304	15.173	28.128	83.288	1.00
	ATOM 13.79	737	CB	TYR	304	16.603	27.634	83.371	1.00
45	ATOM 12.77	738	CG	TYR	304	17.405	27.754	82.136	1.00
	ATOM 10.38	739	CD1	TYR	304	16.859	28.291	80.969	1.00
	ATOM 12.06	740	CE1	TYR	304	17.585	28.347	79.831	1.00
50	ATOM 11.93	741	CD2	TYR	304	18.719	27.284	82.116	1.00
	ATOM 13.56	742	CE2	TYR	304	19.472	27.322	80.975	1.00
55	ATOM 12.06	743	CZ	TYR	304	18.905	27.849	79.818	1.00
	ATOM 11.27	744	OH	TYR	304	19.613	27.789	78.641	1.00

	ATOM 12.51	746	C	TYR	304	14.467	27.548	84.510	1.00
	ATOM 13.97	747	O	TYR	304	13.698	26.601	84.397	1.00
5	ATOM 10.67	748	N	ALA	305	14.756	28.106	85.687	1.00
	ATOM 11.01	750	CA	ALA	305	14.185	27.579	86.929	1.00
10	ATOM 8.23	751	CB	ALA	305	14.918	26.257	87.300	1.00
	ATOM 9.42	752	C	ALA	305	14.335	28.548	88.086	1.00
	ATOM 9.68	753	O	ALA	305	14.999	29.576	87.975	1.00
15	ATOM 8.59	754	N	VAL	306	13.764	28.160	89.216	0.75
	ATOM 8.69	756	CA	VAL	306	13.840	28.902	90.474	0.75
20	ATOM 9.62	757	CB	VAL	306	12.566	29.770	90.740	0.75
	ATOM 10.69	758	CG1	VAL	306	12.431	30.827	89.666	0.75
	ATOM 9.31	759	CG2	VAL	306	11.261	28.883	90.800	0.75
25	ATOM 10.26	760	C	VAL	306	13.930	27.920	91.633	0.75
	ATOM 7.84	761	O	VAL	306	13.482	26.785	91.510	0.75
30	ATOM 12.30	762	N	VAL	307	14.608	28.337	92.710	1.00
	ATOM 14.51	764	CA	VAL	307	14.670	27.582	93.960	1.00
	ATOM 13.59	765	CB	VAL	307	16.115	27.196	94.422	1.00
35	ATOM 14.23	766	CG1	VAL	307	16.019	26.529	95.817	1.00
	ATOM 11.32	767	CG2	VAL	307	16.772	26.224	93.434	1.00
40	ATOM 17.91	768	C	VAL	307	14.092	28.645	94.910	1.00
	ATOM 15.90	769	O	VAL	307	14.711	29.739	95.168	1.00
	ATOM 19.17	770	N	THR	308	12.870	28.400	95.364	1.00
45	ATOM 22.29	772	CA	THR	308	12.176	29.380	96.205	1.00
	ATOM 22.71	773	CB	THR	308	10.645	29.485	95.851	1.00
50	ATOM 21.78	774	OG1	THR	308	10.057	28.188	95.749	1.00
	ATOM 23.24	776	CG2	THR	308	10.462	30.186	94.518	1.00
	ATOM 24.69	777	C	THR	308	12.377	29.339	97.707	1.00
55	ATOM 25.07	778	O	THR	308	11.681	30.033	98.452	1.00
	ATOM 26.35	779	N	ALA	309	13.304	28.499	98.162	1.00



	ATOM 27.81	781	CA	ALA	309	13.617	28.424	99.580	1.00
	ATOM 29.53	782	CB	ALA	309	13.673	26.977	100.049	1.00
5	ATOM 28.47	783	C	ALA	309	14.978	29.105	99.719	1.00
	ATOM 26.56	784	O	ALA	309	15.822	29.050	98.800	1.00
10	ATOM 28.30	785	N	GLU	310	15.204	29.755	100.862	1.00
	ATOM 28.80	787	CA	GLU	310	16.457	30.481	101.096	1.00
	ATOM 29.80	788	CB	GLU	310	16.308	31.391	102.324	1.00
15	ATOM 33.60	789	CG	GLU	310	15.345	32.549	102.045	1.00
	ATOM 35.54	790	CD	GLU	310	14.915	33.346	103.269	1.00
20	ATOM 37.41	791	OE1	GLU	310	15.289	32.988	104.413	1.00
	ATOM 36.45	792	OE2	GLU	310	14.150	34.315	103.080	1.00
	ATOM 28.31	793	C	GLU	310	17.748	29.655	101.157	1.00
25	ATOM 30.35	794	O	GLU	310	17.810	28.605	101.794	1.00
	ATOM 26.38	795	N	PRO	311	18.811	30.121	100.486	1.00
30	ATOM 26.11	796	CD	PRO	311	20.162	29.534	100.647	1.00
	ATOM 23.53	797	CA	PRO	311	18.853	31.351	99.688	1.00
	ATOM 24.89	798	CB	PRO	311	20.363	31.610	99.503	1.00
35	ATOM 26.08	799	CG	PRO	311	20.967	30.221	99.565	1.00
	ATOM 21.13	800	C	PRO	311	18.154	31.132	98.360	1.00
40	ATOM 18.55	801	O	PRO	311	18.378	30.165	97.673	1.00
	ATOM 19.48	802	N	ILE	312	17.312	32.086	98.003	1.00
	ATOM 16.72	804	CA	ILE	312	16.533	32.024	96.777	1.00
45	ATOM 17.73	805	CB	ILE	312	15.440	33.126	96.851	1.00
	ATOM 15.57	806	CG2	ILE	312	14.608	33.129	95.595	1.00
50	ATOM 18.07	807	CG1	ILE	312	14.590	32.867	98.111	1.00
	ATOM 23.33	808	CD1	ILE	312	13.363	33.699	98.238	1.00
	ATOM 15.13	809	C	ILE	312	17.381	32.167	95.524	1.00
55	ATOM 14.05	810	O	ILE	312	18.290	32.987	95.454	1.00
	ATOM 14.30	811	N	TYR	313	17.132	31.311	94.543	1.00

	ATOM 13.21	813	CA	TYR	313	17.875	31.382	93.278	1.00
	ATOM 12.11	814	CB	TYR	313	18.621	30.069	92.976	1.00
5	ATOM 15.64	815	CG	TYR	313	19.762	29.641	93.897	1.00
	ATOM 13.64	816	CD1	TYR	313	20.381	30.523	94.759	1.00
10	ATOM 16.99	817	CE1	TYR	313	21.466	30.126	95.521	1.00
	ATOM 16.93	818	CD2	TYR	313	20.253	28.340	93.835	1.00
	ATOM 18.03	819	CE2	TYR	313	21.336	27.939	94.591	1.00
15	ATOM 17.94	820	CZ	TYR	313	21.940	28.824	95.421	1.00
	ATOM 19.83	821	OH	TYR	313	23.057	28.416	96.101	1.00
20	ATOM 11.00	823	C	TYR	313	16.957	31.575	92.086	1.00
	ATOM 12.08	824	O	TYR	313	15.887	31.020	92.043	1.00
	ATOM 9.52	825	N	ILE	314	17.475	32.251	91.062	0.82
25	ATOM 8.77	827	CA	ILE	314	16.803	32.420	89.761	0.82
	ATOM 8.15	828	CB	ILE	314	16.520	33.902	89.393	0.82
30	ATOM 6.94	829	CG2	ILE	314	15.923	34.013	87.975	0.82
	ATOM 8.58	830	CG1	ILE	314	15.526	34.505	90.382	0.82
	ATOM 8.14	831	CD1	ILE	314	15.304	36.031	90.182	0.82
35	ATOM 5.81	832	C	ILE	314	17.860	31.869	88.807	0.82
	ATOM 4.52	833	O	ILE	314	19.018	32.299	88.802	0.82
40	ATOM 8.34	834	N	ILE	315	17.485	30.858	88.041	1.00
	ATOM 8.77	836	CA	ILE	315	18.410	30.182	87.127	1.00
	ATOM 12.61	837	CB	ILE	315	18.393	28.646	87.369	1.00
45	ATOM 8.22	838	CG2	ILE	315	19.323	27.932	86.355	1.00
	ATOM 11.62	839	CG1	ILE	315	18.811	28.341	88.832	1.00
50	ATOM 11.79	840	CD1	ILE	315	17.659	28.147	89.775	1.00
	ATOM 8.39	841	C	ILE	315	18.045	30.508	85.707	1.00
	ATOM 6.04	842	O	ILE	315	16.885	30.338	85.318	1.00
55	ATOM 5.83	843	N	THR	316	19.021	30.986	84.913	1.00
	ATOM 8.36	845	CA	THR	316	18.699	31.378	83.547	1.00

	ATOM 9.42	846	CB	THR	316	18.750	32.954	83.344	1.00
	ATOM 8.78	847	OG1	THR	316	20.125	33.390	83.423	1.00
5	ATOM 5.91	849	CG2	THR	316	17.943	33.736	84.402	1.00
	ATOM 8.42	850	C	THR	316	19.723	30.856	82.557	1.00
10	ATOM 8.32	851	O	THR	316	20.764	30.284	82.913	1.00
	ATOM 8.36	852	N	GLU	317	19.404	31.112	81.293	1.00
	ATOM 8.92	854	CA	GLU	317	20.263	30.847	80.150	1.00
15	ATOM 8.49	855	CB	GLU	317	19.585	31.516	78.951	1.00
	ATOM 6.91	856	CG	GLU	317	20.295	31.428	77.609	1.00
20	ATOM 11.13	857	CD	GLU	317	19.390	31.856	76.463	1.00
	ATOM 11.40	858	OE1	GLU	317	18.458	32.641	76.728	1.00
	ATOM 9.16	859	OE2	GLU	317	19.614	31.449	75.287	1.00
25	ATOM 9.37	860	C	GLU	317	21.620	31.563	80.429	1.00
	ATOM 7.89	861	O	GLU	317	21.670	32.702	80.956	1.00
30	ATOM 9.26	862	N	TYR	318	22.717	30.885	80.134	1.00
	ATOM 9.46	864	CA	TYR	318	24.049	31.441	80.377	1.00
	ATOM 10.67	865	CB	TYR	318	25.008	30.340	80.828	1.00
35	ATOM 13.70	866	CG	TYR	318	26.398	30.870	81.120	1.00
	ATOM 13.98	867	CD1	TYR	318	26.616	31.658	82.229	1.00
40	ATOM 18.18	868	CE1	TYR	318	27.864	32.130	82.529	1.00
	ATOM 14.21	869	CD2	TYR	318	27.487	30.564	80.291	1.00
	ATOM 14.28	870	CE2	TYR	318	28.764	31.049	80.592	1.00
45	ATOM 15.79	871	CZ	TYR	318	28.933	31.822	81.710	1.00
	ATOM 19.16	872	OH	TYR	318	30.161	32.311	82.066	1.00
50	ATOM 9.19	874	C	TYR	318	24.561	32.132	79.110	1.00
	ATOM 9.33	875	O	TYR	318	24.480	31.588	78.010	1.00
	ATOM 8.48	876	N	MET	319	24.978	33.390	79.243	1.00
55	ATOM 9.42	878	CA	MET	319	25.453	34.147	78.066	1.00
	ATOM 10.85	879	CB	MET	319	24.787	35.524	78.046	1.00

	ATOM 11.71	880	CG	MET	319	23.237	35.423	77.946	1.00
	ATOM 13.99	881	SD	MET	319	22.750	34.629	76.411	1.00
5	ATOM 8.87	882	CE	MET	319	23.254	35.844	75.227	1.00
	ATOM 9.69	883	C	MET	319	26.968	34.254	78.250	1.00
10	ATOM 7.90	884	O	MET	319	27.462	35.031	79.087	1.00
	ATOM 6.36	885	N	GLU	320	27.684	33.493	77.435	1.00
	ATOM 10.55	887	CA	GLU	320	29.135	33.342	77.540	1.00
15	ATOM 11.97	888	CB	GLU	320	29.642	32.303	76.508	1.00
	ATOM 20.65	889	CG	GLU	320	31.146	31.906	76.652	1.00
20	ATOM 24.26	890	CD	GLU	320	31.485	31.222	77.983	1.00
	ATOM 27.15	891	OE1	GLU	320	31.327	29.988	78.068	1.00
	ATOM 28.40	892	OE2	GLU	320	31.922	31.915	78.944	1.00
25	ATOM 11.16	893	C	GLU	320	30.005	34.588	77.524	1.00
	ATOM 12.37	894	O	GLU	320	31.031	34.639	78.213	1.00
30	ATOM 11.28	895	N	ASN	321	29.628	35.555	76.695	1.00
	ATOM 11.02	897	CA	ASN	321	30.374	36.782	76.561	1.00
	ATOM 12.54	898	CB	ASN	321	30.451	37.230	75.093	1.00
35	ATOM 13.58	899	CG	ASN	321	31.520	36.474	74.337	1.00
	ATOM 12.04	900	OD1	ASN	321	32.638	36.338	74.833	1.00
40	ATOM 11.91	901	ND2	ASN	321	31.171	35.921	73.195	1.00
	ATOM 11.39	904	C	ASN	321	29.917	37.887	77.473	1.00
	ATOM 12.51	905	O	ASN	321	30.356	39.014	77.315	1.00
45	ATOM 8.41	906	N	GLY	322	29.017	37.536	78.403	1.00
	ATOM 6.95	908	CA	GLY	322	28.528	38.421	79.427	1.00
50	ATOM 6.87	909	C	GLY	322	27.900	39.733	78.973	1.00
	ATOM 7.74	910	O	GLY	322	27.255	39.785	77.923	1.00
	ATOM 2.00	911	N	SER	323	28.125	40.794	79.731	0.43
55	ATOM 2.39	913	CA	SER	323	27.539	42.086	79.394	0.43
	ATOM 2.00	914	CB	SER	323	27.636	42.956	80.635	0.43

	ATOM	915	OG	SER	323	27.155	44.230	80.416	0.43
	2.00								
	ATOM	917	C	SER	323	28.122	42.789	78.147	0.43
	4.13								
5	ATOM	918	O	SER	323	29.336	42.891	77.969	0.43
	2.00								
	ATOM	919	N	LEU	324	27.239	43.287	77.279	1.00
	7.40								
10	ATOM	921	CA	LEU	324	27.659	43.959	76.056	1.00
	8.58								
	ATOM	922	CB	LEU	324	26.460	44.460	75.264	1.00
	7.55								
	ATOM	923	CG	LEU	324	26.757	45.294	74.010	1.00
	8.52								
15	ATOM	924	CD1	LEU	324	27.410	44.434	72.917	1.00
	8.10								
	ATOM	925	CD2	LEU	324	25.382	45.839	73.496	1.00
	7.07								
20	ATOM	926	C	LEU	324	28.586	45.151	76.367	1.00
	8.58								
	ATOM	927	O	LEU	324	29.549	45.352	75.682	1.00
	9.01								
	ATOM	928	N	VAL	325	28.264	45.917	77.398	1.00
	9.65								
25	ATOM	930	CA	VAL	325	29.091	47.041	77.763	1.00
	12.45								
	ATOM	931	CB	VAL	325	28.433	47.877	78.896	1.00
	10.82								
30	ATOM	932	CG1	VAL	325	28.708	47.274	80.325	1.00
	10.26								
	ATOM	933	CG2	VAL	325	28.931	49.339	78.773	1.00
	14.55								
	ATOM	934	C	VAL	325	30.535	46.567	78.096	1.00
	14.06								
35	ATOM	935	O	VAL	325	31.517	47.235	77.720	1.00
	15.13								
	ATOM	936	N	ASP	326	30.673	45.387	78.718	1.00
	12.37								
40	ATOM	938	CA	ASP	326	32.016	44.853	79.026	1.00
	11.79								
	ATOM	939	CB	ASP	326	32.000	43.837	80.173	1.00
	12.18								
	ATOM	940	CG	ASP	326	31.535	44.411	81.453	1.00
	15.66								
45	ATOM	941	OD1	ASP	326	31.852	45.571	81.744	1.00
	17.87								
	ATOM	942	OD2	ASP	326	30.858	43.685	82.212	1.00
	15.29								
	ATOM	943	C	ASP	326	32.637	44.163	77.814	1.00
50	9.96								
	ATOM	944	O	ASP	326	33.831	44.319	77.505	1.00
	11.59								
	ATOM	945	N	PHE	327	31.824	43.432	77.071	1.00
	9.51								
55	ATOM	947	CA	PHE	327	32.316	42.701	75.916	1.00
	9.01								
	ATOM	948	CB	PHE	327	31.214	41.835	75.309	1.00
	8.68								

	ATOM 12.74	949	CG	PHE	327	31.612	41.231	73.975	1.00
	ATOM 9.77	950	CD1	PHE	327	32.505	40.144	73.926	1.00
5	ATOM 9.21	951	CD2	PHE	327	31.163	41.782	72.780	1.00
	ATOM 9.36	952	CE1	PHE	327	32.936	39.628	72.731	1.00
10	ATOM 12.46	953	CE2	PHE	327	31.586	41.283	71.557	1.00
	ATOM 13.61	954	CZ	PHE	327	32.500	40.177	71.527	1.00
	ATOM 9.16	955	C	PHE	327	32.926	43.614	74.805	1.00
15	ATOM 6.44	956	O	PHE	327	33.917	43.268	74.158	1.00
	ATOM 3.00	957	N	LEU	328	32.333	44.793	74.602	0.40
20	ATOM 3.56	959	CA	LEU	328	32.806	45.699	73.566	0.40
	ATOM 2.90	960	CB	LEU	328	31.804	46.853	73.418	0.40
	ATOM 2.00	961	CG	LEU	328	30.746	46.915	72.301	0.40
25	ATOM 2.00	962	CD1	LEU	328	30.559	45.669	71.533	0.40
	ATOM 3.15	963	CD2	LEU	328	29.472	47.450	72.887	0.40
30	ATOM 4.10	964	C	LEU	328	34.220	46.262	73.819	0.40
	ATOM 2.00	965	O	LEU	328	34.886	46.785	72.935	0.40
	ATOM 8.38	966	N	LYS	329	34.640	46.172	75.069	1.00
35	ATOM 12.01	968	CA	LYS	329	35.947	46.662	75.537	1.00
	ATOM 11.97	969	CB	LYS	329	35.810	47.192	76.963	1.00
40	ATOM 11.78	970	CG	LYS	329	34.926	48.431	77.072	1.00
	ATOM 9.98	971	CD	LYS	329	34.774	48.868	78.519	1.00
	ATOM 13.45	972	CE	LYS	329	33.652	49.917	78.635	1.00
45	ATOM 15.31	973	NZ	LYS	329	33.460	50.307	80.062	1.00
	ATOM 14.87	977	C	LYS	329	37.049	45.608	75.486	1.00
50	ATOM 16.51	978	O	LYS	329	38.235	45.940	75.621	1.00
	ATOM 13.19	979	N	THR	330	36.670	44.349	75.254	1.00
	ATOM 11.60	981	CA	THR	330	37.649	43.250	75.198	1.00
55	ATOM 7.69	982	CB	THR	330	36.942	41.856	75.342	1.00
	ATOM 5.64	983	OG1	THR	330	36.045	41.654	74.260	1.00

	ATOM 8.84	985	CG2	THR	330	36.173	41.737	76.601	1.00
	ATOM 12.19	986	C	THR	330	38.311	43.273	73.803	1.00
5	ATOM 15.01	987	O	THR	330	37.808	43.897	72.863	1.00
	ATOM 13.69	988	N	PRO	331	39.429	42.542	73.628	1.00
10	ATOM 13.18	989	CD	PRO	331	40.235	41.842	74.656	1.00
	ATOM 13.57	990	CA	PRO	331	40.097	42.512	72.323	1.00
	ATOM 12.36	991	CB	PRO	331	41.247	41.522	72.562	1.00
15	ATOM 12.02	992	CG	PRO	331	41.598	41.771	73.979	1.00
	ATOM 14.37	993	C	PRO	331	39.143	42.046	71.197	1.00
20	ATOM 15.73	994	O	PRO	331	39.223	42.517	70.063	1.00
	ATOM 13.66	995	N	SER	332	38.238	41.108	71.488	1.00
	ATOM 15.74	997	CA	SER	332	37.310	40.655	70.431	1.00
25	ATOM 14.92	998	CB	SER	332	36.532	39.391	70.863	1.00
	ATOM 20.31	999	OG	SER	332	37.433	38.325	71.143	1.00
30	ATOM 14.88	1001	C	SER	332	36.311	41.746	70.053	1.00
	ATOM 17.21	1002	O	SER	332	36.038	41.960	68.881	1.00
	ATOM 14.09	1003	N	GLY	333	35.726	42.389	71.059	1.00
35	ATOM 15.72	1005	CA	GLY	333	34.763	43.457	70.818	1.00
	ATOM 15.81	1006	C	GLY	333	35.393	44.613	70.033	1.00
40	ATOM 15.33	1007	O	GLY	333	34.794	45.122	69.089	1.00
	ATOM 16.19	1008	N	ILE	334	36.608	45.004	70.414	1.00
	ATOM 16.93	1010	CA	ILE	334	37.340	46.096	69.746	1.00
45	ATOM 18.36	1011	CB	ILE	334	38.718	46.326	70.430	1.00
	ATOM 19.31	1012	CG2	ILE	334	39.584	47.319	69.606	1.00
50	ATOM 18.58	1013	CG1	ILE	334	38.476	46.832	71.855	1.00
	ATOM 21.36	1014	CD1	ILE	334	39.750	46.931	72.714	1.00
	ATOM 17.57	1015	C	ILE	334	37.528	45.878	68.259	1.00
55	ATOM 18.66	1016	O	ILE	334	37.469	46.798	67.474	1.00
	ATOM 19.23	1017	N	LYS	335	37.752	44.640	67.850	1.00

	ATOM	1019	CA	LYS	335	37.936	44.350	66.446	1.00
	19.72								
	ATOM	1020	CB	LYS	335	38.745	43.076	66.305	1.00
	23.00								
5	ATOM	1021	CG	LYS	335	40.107	43.204	66.963	1.00
	27.33								
	ATOM	1022	CD	LYS	335	40.692	41.872	67.270	1.00
	30.63								
10	ATOM	1023	CE	LYS	335	41.873	42.040	68.182	1.00
	31.48								
	ATOM	1024	NZ	LYS	335	42.292	40.723	68.592	1.00
	31.57								
	ATOM	1028	C	LYS	335	36.628	44.242	65.628	1.00
	18.64								
15	ATOM	1029	O	LYS	335	36.655	44.080	64.417	1.00
	16.73								
	ATOM	1030	N	LEU	336	35.480	44.410	66.269	1.00
	16.82								
20	ATOM	1032	CA	LEU	336	34.210	44.297	65.520	1.00
	15.13								
	ATOM	1033	CB	LEU	336	33.015	44.291	66.470	1.00
	15.27								
	ATOM	1034	CG	LEU	336	32.912	43.123	67.484	1.00
	18.77								
25	ATOM	1035	CD1	LEU	336	31.580	43.183	68.225	1.00
	17.54								
	ATOM	1036	CD2	LEU	336	33.070	41.761	66.812	1.00
	13.51								
30	ATOM	1037	C	LEU	336	34.045	45.428	64.522	1.00
	16.15								
	ATOM	1038	O	LEU	336	34.293	46.566	64.858	1.00
	17.28								
	ATOM	1039	N	THR	337	33.595	45.103	63.301	1.00
	17.02								
35	ATOM	1041	CA	THR	337	33.375	46.095	62.260	1.00
	17.40								
	ATOM	1042	CB	THR	337	33.280	45.449	60.901	1.00
	17.62								
40	ATOM	1043	OG1	THR	337	32.197	44.481	60.893	1.00
	19.04								
	ATOM	1045	CG2	THR	337	34.638	44.736	60.559	1.00
	21.95								
	ATOM	1046	C	THR	337	32.056	46.827	62.515	1.00
	16.83								
45	ATOM	1047	O	THR	337	31.185	46.334	63.289	1.00
	15.94								
	ATOM	1048	N	ILE	338	31.873	47.975	61.859	1.00
	14.47								
50	ATOM	1050	CA	ILE	338	30.628	48.715	62.042	1.00
	13.03								
	ATOM	1051	CB	ILE	338	30.579	50.047	61.246	1.00
	12.67								
	ATOM	1052	CG2	ILE	338	30.812	49.779	59.745	1.00
	13.10								
55	ATOM	1053	CG1	ILE	338	29.248	50.761	61.561	1.00
	11.18								
	ATOM	1054	CD1	ILE	338	29.074	51.054	63.101	1.00
	9.52								



	ATOM	1055	C	ILE	338	29.456	47.820	61.624	1.00
	11.79								
	ATOM	1056	O	ILE	338	28.400	47.872	62.208	1.00
	11.62								
5	ATOM	1057	N	ASN	339	29.703	46.940	60.647	1.00
	11.95								
	ATOM	1059	CA	ASN	339	28.697	46.004	60.140	1.00
	14.07								
10	ATOM	1060	CB	ASN	339	29.293	45.192	58.963	1.00
	17.39								
	ATOM	1061	CG	ASN	339	28.391	44.043	58.510	1.00
	24.54								
	ATOM	1062	OD1	ASN	339	28.660	42.860	58.826	1.00
	26.23								
15	ATOM	1063	ND2	ASN	339	27.328	44.365	57.761	1.00
	23.79								
	ATOM	1066	C	ASN	339	28.155	45.087	61.240	1.00
	12.19								
	ATOM	1067	O	ASN	339	26.929	44.936	61.424	1.00
20	9.91								
	ATOM	1068	N	LYS	340	29.065	44.515	62.028	1.00
	10.14								
	ATOM	1070	CA	LYS	340	28.660	43.623	63.090	1.00
	8.13								
25	ATOM	1071	CB	LYS	340	29.841	42.738	63.522	1.00
	8.27								
	ATOM	1072	CG	LYS	340	29.559	41.849	64.749	1.00
	5.54								
	ATOM	1073	CD	LYS	340	28.492	40.798	64.448	1.00
30	7.28								
	ATOM	1074	CE	LYS	340	28.114	39.995	65.721	1.00
	7.51								
	ATOM	1075	NZ	LYS	340	27.019	39.000	65.349	1.00
	10.96								
35	ATOM	1079	C	LYS	340	28.030	44.410	64.260	1.00
	7.62								
	ATOM	1080	O	LYS	340	27.116	43.947	64.943	1.00
	7.08								
40	ATOM	1081	N	LEU	341	28.461	45.644	64.477	1.00
	6.47								
	ATOM	1083	CA	LEU	341	27.845	46.435	65.569	1.00
	5.96								
	ATOM	1084	CB	LEU	341	28.621	47.727	65.862	1.00
	4.03								
45	ATOM	1085	CG	LEU	341	30.109	47.507	66.294	1.00
	7.36								
	ATOM	1086	CD1	LEU	341	30.826	48.855	66.323	1.00
	6.06								
	ATOM	1087	CD2	LEU	341	30.217	46.836	67.674	1.00
50	7.12								
	ATOM	1088	C	LEU	341	26.400	46.770	65.202	1.00
	3.96								
	ATOM	1089	O	LEU	341	25.529	46.844	66.082	1.00
	6.11								
55	ATOM	1090	N	LEU	342	26.156	47.004	63.920	1.00
	6.18								
	ATOM	1092	CA	LEU	342	24.815	47.310	63.419	1.00
	7.59								

	ATOM 8.88	1093	CB	LEU	342	24.885	47.755	61.956	1.00
	ATOM 11.62	1094	CG	LEU	342	25.484	49.180	61.797	1.00
5	ATOM 10.17	1095	CD1	LEU	342	25.823	49.430	60.312	1.00
	ATOM 7.90	1096	CD2	LEU	342	24.493	50.268	62.373	1.00
10	ATOM 7.74	1097	C	LEU	342	23.909	46.080	63.537	1.00
	ATOM 8.65	1098	O	LEU	342	22.686	46.172	63.764	1.00
	ATOM 9.65	1099	N	ASP	343	24.505	44.936	63.238	1.00
15	ATOM 8.35	1101	CA	ASP	343	23.823	43.621	63.312	1.00
	ATOM 7.51	1102	CB	ASP	343	24.860	42.510	62.947	1.00
20	ATOM 10.12	1103	CG	ASP	343	24.387	41.116	63.308	1.00
	ATOM 8.76	1104	OD1	ASP	343	23.166	40.929	63.483	1.00
	ATOM 10.74	1105	OD2	ASP	343	25.234	40.206	63.368	1.00
25	ATOM 7.81	1106	C	ASP	343	23.333	43.500	64.763	1.00
	ATOM 8.47	1107	O	ASP	343	22.134	43.420	65.022	1.00
30	ATOM 8.09	1108	N	MET	344	24.259	43.572	65.710	1.00
	ATOM 10.16	1110	CA	MET	344	23.919	43.525	67.133	1.00
	ATOM 10.84	1111	CB	MET	344	25.168	43.775	67.997	1.00
35	ATOM 15.39	1112	CG	MET	344	26.224	42.685	67.796	1.00
	ATOM 20.54	1113	SD	MET	344	27.746	43.042	68.667	1.00
40	ATOM 13.40	1114	CE	MET	344	27.504	42.221	70.052	1.00
	ATOM 8.86	1115	C	MET	344	22.844	44.544	67.503	1.00
	ATOM 7.44	1116	O	MET	344	21.957	44.225	68.265	1.00
45	ATOM 7.26	1117	N	ALA	345	23.006	45.808	67.087	1.00
	ATOM 5.67	1119	CA	ALA	345	21.959	46.828	67.380	1.00
50	ATOM 4.54	1120	CB	ALA	345	22.290	48.136	66.681	1.00
	ATOM 5.23	1121	C	ALA	345	20.590	46.309	66.889	1.00
	ATOM 3.90	1122	O	ALA	345	19.589	46.445	67.587	1.00
55	ATOM 5.10	1123	N	ALA	346	20.545	45.783	65.662	1.00
	ATOM 7.13	1125	CA	ALA	346	19.305	45.238	65.119	1.00

	ATOM	1126	CB	ALA	346	19.459	44.810	63.656	1.00
	8.22								
	ATOM	1127	C	ALA	346	18.766	44.079	65.974	1.00
	7.97								
5	ATOM	1128	O	ALA	346	17.529	43.993	66.187	1.00
	8.44								
	ATOM	1129	N	GLN	347	19.643	43.170	66.451	1.00
	8.27								
10	ATOM	1131	CA	GLN	347	19.202	42.062	67.330	1.00
	8.51								
	ATOM	1132	CB	GLN	347	20.367	41.169	67.763	1.00
	5.95								
	ATOM	1133	CG	GLN	347	21.081	40.521	66.547	1.00
	6.80								
15	ATOM	1134	CD	GLN	347	22.118	39.500	66.933	1.00
	5.32								
	ATOM	1135	OE1	GLN	347	22.064	38.966	68.019	1.00
	7.59								
	ATOM	1136	NE2	GLN	347	23.057	39.196	66.016	1.00
	8.42								
20	ATOM	1139	C	GLN	347	18.522	42.623	68.566	1.00
	8.39								
	ATOM	1140	O	GLN	347	17.477	42.131	69.008	1.00
	9.27								
25	ATOM	1141	N	ILE	348	19.099	43.676	69.133	1.00
	5.65								
	ATOM	1143	CA	ILE	348	18.502	44.278	70.327	1.00
	7.21								
	ATOM	1144	CB	ILE	348	19.440	45.351	70.966	1.00
	5.99								
30	ATOM	1145	CG2	ILE	348	18.820	45.942	72.262	1.00
	6.69								
	ATOM	1146	CG1	ILE	348	20.761	44.628	71.411	1.00
	9.42								
35	ATOM	1147	CD1	ILE	348	21.921	45.569	71.586	1.00
	11.33								
	ATOM	1148	C	ILE	348	17.131	44.880	70.028	1.00
	5.07								
	ATOM	1149	O	ILE	348	16.247	44.767	70.856	1.00
	4.61								
40	ATOM	1150	N	ALA	349	16.994	45.538	68.865	1.00
	7.16								
	ATOM	1152	CA	ALA	349	15.724	46.206	68.493	1.00
	9.08								
45	ATOM	1153	CB	ALA	349	15.871	47.041	67.216	1.00
	6.01								
	ATOM	1154	C	ALA	349	14.687	45.087	68.274	1.00
	9.02								
	ATOM	1155	O	ALA	349	13.523	45.231	68.595	1.00
	4.41								
50	ATOM	1156	N	GLU	350	15.179	43.954	67.774	1.00
	7.05								
	ATOM	1158	CA	GLU	350	14.339	42.778	67.527	1.00
	8.60								
55	ATOM	1159	CB	GLU	350	15.143	41.692	66.794	1.00
	9.61								
	ATOM	1160	CG	GLU	350	14.353	40.388	66.563	1.00
	12.76								

	ATOM	1161	CD	GLU	350	15.117	39.374	65.703	1.00
	14.23								
	ATOM	1162	OE1	GLU	350	16.121	39.721	65.028	1.00
	11.84								
5	ATOM	1163	OE2	GLU	350	14.649	38.234	65.655	1.00
	15.86								
	ATOM	1164	C	GLU	350	13.773	42.270	68.839	1.00
	7.48								
10	ATOM	1165	O	GLU	350	12.564	42.004	68.956	1.00
	8.86								
	ATOM	1166	N	GLY	351	14.616	42.185	69.853	1.00
	5.37								
	ATOM	1168	CA	GLY	351	14.183	41.757	71.173	1.00
	5.89								
15	ATOM	1169	C	GLY	351	13.196	42.777	71.765	1.00
	7.42								
	ATOM	1170	O	GLY	351	12.149	42.414	72.368	1.00
	6.11								
20	ATOM	1171	N	MET	352	13.522	44.055	71.628	1.00
	4.75								
	ATOM	1173	CA	MET	352	12.617	45.113	72.122	1.00
	6.41								
	ATOM	1174	CB	MET	352	13.287	46.490	72.111	1.00
	5.29								
25	ATOM	1175	CG	MET	352	14.426	46.629	73.178	1.00
	6.68								
	ATOM	1176	SD	MET	352	13.960	46.322	74.854	1.00
	9.97								
30	ATOM	1177	CE	MET	352	12.604	47.517	75.127	1.00
	9.15								
	ATOM	1178	C	MET	352	11.290	45.173	71.332	1.00
	7.01								
	ATOM	1179	O	MET	352	10.292	45.583	71.906	1.00
	8.77								
35	ATOM	1180	N	ALA	353	11.263	44.738	70.064	1.00
	8.07								
	ATOM	1182	CA	ALA	353	10.020	44.738	69.279	1.00
	5.88								
40	ATOM	1183	CB	ALA	353	10.291	44.491	67.828	1.00
	7.39								
	ATOM	1184	C	ALA	353	9.090	43.646	69.840	1.00
	9.76								
	ATOM	1185	O	ALA	353	7.869	43.788	69.823	1.00
	7.82								
45	ATOM	1186	N	PHE	354	9.669	42.551	70.362	1.00
	9.39								
	ATOM	1188	CA	PHE	354	8.853	41.481	70.978	1.00
	9.75								
50	ATOM	1189	CB	PHE	354	9.693	40.227	71.299	1.00
	8.22								
	ATOM	1190	CG	PHE	354	8.974	39.223	72.218	1.00
	9.88								
	ATOM	1191	CD1	PHE	354	7.912	38.441	71.738	1.00
	12.19								
55	ATOM	1192	CD2	PHE	354	9.311	39.119	73.547	1.00
	10.85								
	ATOM	1193	CE1	PHE	354	7.202	37.566	72.617	1.00
	9.37								

	ATOM 12.35	1194	CE2	PHE	354	8.605	38.254	74.435	1.00
	ATOM 10.17	1195	CZ	PHE	354	7.558	37.488	73.953	1.00
5	ATOM 6.25	1196	C	PHE	354	8.261	42.030	72.284	1.00
	ATOM 7.01	1197	O	PHE	354	7.094	41.874	72.566	1.00
10	ATOM 6.36	1198	N	ILE	355	9.092	42.739	73.058	1.00
	ATOM 8.20	1200	CA	ILE	355	8.659	43.342	74.331	1.00
	ATOM 6.84	1201	CB	ILE	355	9.866	43.958	75.089	1.00
15	ATOM 8.30	1202	CG2	ILE	355	9.418	44.825	76.269	1.00
	ATOM 7.74	1203	CG1	ILE	355	10.754	42.822	75.583	1.00
20	ATOM 5.93	1204	CD1	ILE	355	11.983	43.271	76.310	1.00
	ATOM 6.49	1205	C	ILE	355	7.512	44.343	74.094	1.00
	ATOM 6.90	1206	O	ILE	355	6.490	44.314	74.750	1.00
25	ATOM 8.41	1207	N	GLU	356	7.710	45.180	73.091	1.00
	ATOM 8.52	1209	CA	GLU	356	6.764	46.190	72.643	1.00
30	ATOM 10.94	1210	CB	GLU	356	7.404	46.906	71.442	1.00
	ATOM 13.83	1211	CG	GLU	356	6.454	47.665	70.479	1.00
	ATOM 13.44	1212	CD	GLU	356	7.254	48.392	69.370	1.00
35	ATOM 14.28	1213	OE1	GLU	356	7.847	49.387	69.756	1.00
	ATOM 15.54	1214	OE2	GLU	356	7.325	47.968	68.147	1.00
40	ATOM 9.09	1215	C	GLU	356	5.430	45.503	72.239	1.00
	ATOM 7.12	1216	O	GLU	356	4.346	45.884	72.696	1.00
	ATOM 2.80	1217	N	GLU	357	5.519	44.442	71.446	0.36
45	ATOM 3.40	1219	CA	GLU	357	4.326	43.725	71.021	0.36
	ATOM 2.45	1220	CB	GLU	357	4.695	42.730	69.894	0.36
50	ATOM 4.19	1221	CG	GLU	357	3.553	41.917	69.325	0.36
	ATOM 6.13	1222	CD	GLU	357	3.246	40.699	70.168	0.36
	ATOM 6.48	1223	OE1	GLU	357	4.126	40.269	70.946	0.36
55	ATOM 10.01	1224	OE2	GLU	357	2.125	40.154	70.084	0.36
	ATOM 4.04	1225	C	GLU	357	3.533	43.067	72.169	0.36

	ATOM 2.00	1226	O	GLU	357	2.308	43.006	72.126	0.36
	ATOM 7.81	1227	N	ARG	358	4.227	42.632	73.225	1.00
5	ATOM 9.23	1229	CA	ARG	358	3.576	41.991	74.384	1.00
	ATOM 10.13	1230	CB	ARG	358	4.553	41.053	75.146	1.00
10	ATOM 12.15	1231	CG	ARG	358	5.072	39.858	74.336	1.00
	ATOM 17.62	1232	CD	ARG	358	3.926	39.058	73.620	1.00
	ATOM 20.90	1233	NE	ARG	358	2.936	38.578	74.565	1.00
15	ATOM 23.73	1235	CZ	ARG	358	1.667	38.272	74.262	1.00
	ATOM 22.10	1236	NH1	ARG	358	1.205	38.382	73.027	1.00
20	ATOM 23.38	1239	NH2	ARG	358	0.849	37.875	75.216	1.00
	ATOM 8.80	1242	C	ARG	358	2.981	42.972	75.372	1.00
	ATOM 8.51	1243	O	ARG	358	2.491	42.582	76.428	1.00
25	ATOM 11.15	1244	N	ASN	359	3.069	44.265	75.044	1.00
	ATOM 11.08	1246	CA	ASN	359	2.553	45.318	75.904	1.00
30	ATOM 12.23	1247	CB	ASN	359	1.087	45.040	76.266	1.00
	ATOM 13.91	1248	CG	ASN	359	0.166	45.474	75.167	1.00
	ATOM 15.68	1249	OD1	ASN	359	0.623	45.997	74.195	1.00
35	ATOM 15.64	1250	ND2	ASN	359	-1.155	45.286	75.340	1.00
	ATOM 11.57	1253	C	ASN	359	3.386	45.571	77.130	1.00
40	ATOM 9.73	1254	O	ASN	359	2.889	46.060	78.149	1.00
	ATOM 9.79	1255	N	TYR	360	4.671	45.185	77.063	1.00
	ATOM 9.21	1257	CA	TYR	360	5.546	45.422	78.204	1.00
45	ATOM 10.72	1258	CB	TYR	360	6.419	44.185	78.492	1.00
	ATOM 12.72	1259	CG	TYR	360	5.739	43.135	79.337	1.00
50	ATOM 14.34	1260	CD1	TYR	360	6.013	43.026	80.680	1.00
	ATOM 16.48	1261	CE1	TYR	360	5.384	42.030	81.474	1.00
	ATOM 14.33	1262	CD2	TYR	360	4.827	42.262	78.776	1.00
55	ATOM 16.68	1263	CE2	TYR	360	4.201	41.275	79.548	1.00
	ATOM 15.37	1264	CZ	TYR	360	4.485	41.174	80.888	1.00

	ATOM 18.48	1265	OH	TYR	360	3.883	40.198	81.637	1.00
	ATOM 7.60	1267	C	TYR	360	6.497	46.577	77.919	1.00
5	ATOM 7.26	1268	O	TYR	360	6.607	47.058	76.807	1.00
	ATOM 9.03	1269	N	ILE	361	7.168	47.026	78.969	1.00
10	ATOM 9.74	1271	CA	ILE	361	8.203	48.037	78.812	1.00
	ATOM 9.50	1272	CB	ILE	361	7.832	49.459	79.382	1.00
	ATOM 11.71	1273	CG2	ILE	361	6.744	50.166	78.488	1.00
15	ATOM 12.15	1274	CG1	ILE	361	7.386	49.365	80.828	1.00
	ATOM 15.27	1275	CD1	ILE	361	6.910	50.681	81.374	1.00
20	ATOM 8.68	1276	C	ILE	361	9.331	47.424	79.625	1.00
	ATOM 10.97	1277	O	ILE	361	9.099	46.637	80.511	1.00
	ATOM 8.96	1278	N	HIS	362	10.543	47.913	79.424	1.00
25	ATOM 7.95	1280	CA	HIS	362	11.694	47.388	80.151	1.00
	ATOM 8.38	1281	CB	HIS	362	12.803	47.084	79.099	1.00
30	ATOM 9.73	1282	CG	HIS	362	14.005	46.405	79.671	1.00
	ATOM 7.39	1283	CD2	HIS	362	14.377	45.108	79.655	1.00
	ATOM 6.36	1284	ND1	HIS	362	14.963	47.070	80.419	1.00
35	ATOM 9.86	1286	CE1	HIS	362	15.874	46.209	80.825	1.00
	ATOM 10.13	1287	NE2	HIS	362	15.536	45.003	80.378	1.00
40	ATOM 7.43	1289	C	HIS	362	12.156	48.394	81.208	1.00
	ATOM 7.91	1290	O	HIS	362	12.404	48.038	82.372	1.00
	ATOM 8.44	1291	N	ARG	363	12.324	49.657	80.794	1.00
45	ATOM 8.08	1293	CA	ARG	363	12.763	50.776	81.671	1.00
	ATOM 9.73	1294	CB	ARG	363	11.876	50.937	82.919	1.00
50	ATOM 13.47	1295	CG	ARG	363	10.387	51.082	82.599	1.00
	ATOM 13.85	1296	CD	ARG	363	9.586	51.484	83.839	1.00
	ATOM 13.20	1297	NE	ARG	363	9.685	50.538	84.930	1.00
55	ATOM 15.35	1299	CZ	ARG	363	9.722	50.888	86.212	1.00
	ATOM 14.95	1300	NH1	ARG	363	9.674	52.171	86.564	1.00

	ATOM	1303	NH2	ARG	363	9.738	49.956	87.151	1.00
	14.46								
	ATOM	1306	C	ARG	363	14.223	50.794	82.112	1.00
	9.76								
5	ATOM	1307	O	ARG	363	14.650	51.732	82.791	1.00
	9.55								
	ATOM	1308	N	ASP	364	15.026	49.830	81.665	1.00
	9.49								
10	ATOM	1310	CA	ASP	364	16.451	49.811	82.066	1.00
	10.04								
	ATOM	1311	CB	ASP	364	16.639	48.836	83.240	1.00
	9.98								
	ATOM	1312	CG	ASP	364	17.888	49.148	84.107	1.00
	14.26								
15	ATOM	1313	OD1	ASP	364	18.594	50.156	83.889	1.00
	14.89								
	ATOM	1314	OD2	ASP	364	18.129	48.394	85.062	1.00
	13.47								
20	ATOM	1315	C	ASP	364	17.262	49.368	80.858	1.00
	9.74								
	ATOM	1316	O	ASP	364	18.196	48.554	80.943	1.00
	8.70								
	ATOM	1317	N	LEU	365	16.825	49.827	79.689	1.00
	7.97								
25	ATOM	1319	CA	LEU	365	17.483	49.485	78.455	1.00
	8.00								
	ATOM	1320	CB	LEU	365	16.568	49.811	77.255	1.00
	7.28								
30	ATOM	1321	CG	LEU	365	17.078	49.446	75.865	1.00
	8.56								
	ATOM	1322	CD1	LEU	365	17.582	47.986	75.822	1.00
	11.42								
	ATOM	1323	CD2	LEU	365	15.960	49.617	74.849	1.00
	11.34								
35	ATOM	1324	C	LEU	365	18.818	50.270	78.340	1.00
	10.93								
	ATOM	1325	O	LEU	365	18.840	51.495	78.137	1.00
	13.74								
40	ATOM	1326	N	ARG	366	19.924	49.544	78.418	1.00
	8.54								
	ATOM	1328	CA	ARG	366	21.264	50.124	78.320	1.00
	10.81								
	ATOM	1329	CB	ARG	366	21.658	50.813	79.638	1.00
	10.58								
45	ATOM	1330	CG	ARG	366	21.516	49.930	80.844	1.00
	13.47								
	ATOM	1331	CD	ARG	366	21.725	50.740	82.138	1.00
	18.51								
50	ATOM	1332	NE	ARG	366	23.068	51.312	82.233	1.00
	18.31								
	ATOM	1334	CZ	ARG	366	23.459	52.090	83.234	1.00
	20.91								
	ATOM	1335	NH1	ARG	366	22.610	52.392	84.208	1.00
	21.08								
55	ATOM	1338	NH2	ARG	366	24.696	52.554	83.279	1.00
	21.60								
	ATOM	1341	C	ARG	366	22.190	48.951	78.021	1.00
	11.69								



	ATOM 6.35	1342	O	ARG	366	21.838	47.814	78.289	1.00
	ATOM 9.93	1343	N	ALA	367	23.355	49.245	77.439	1.00
5	ATOM 9.46	1345	CA	ALA	367	24.324	48.205	77.065	1.00
	ATOM 8.97	1346	CB	ALA	367	25.569	48.855	76.478	1.00
10	ATOM 9.81	1347	C	ALA	367	24.707	47.242	78.203	1.00
	ATOM 10.18	1348	O	ALA	367	25.001	46.038	77.968	1.00
	ATOM 7.59	1349	N	ALA	368	24.676	47.737	79.435	1.00
15	ATOM 9.89	1351	CA	ALA	368	24.992	46.897	80.570	1.00
	ATOM 8.37	1352	CB	ALA	368	24.928	47.694	81.854	1.00
20	ATOM 11.64	1353	C	ALA	368	23.979	45.752	80.670	1.00
	ATOM 8.73	1354	O	ALA	368	24.293	44.629	81.180	1.00
	ATOM 7.92	1355	N	ASN	369	22.771	46.039	80.198	1.00
25	ATOM 9.98	1357	CA	ASN	369	21.687	45.091	80.307	1.00
	ATOM 7.16	1358	CB	ASN	369	20.453	45.804	80.894	1.00
30	ATOM 9.70	1359	CG	ASN	369	20.658	46.204	82.338	1.00
	ATOM 9.63	1360	OD1	ASN	369	21.472	45.576	83.079	1.00
	ATOM 7.25	1361	ND2	ASN	369	19.954	47.251	82.775	1.00
35	ATOM 8.69	1364	C	ASN	369	21.381	44.285	79.055	1.00
	ATOM 10.46	1365	O	ASN	369	20.265	43.723	78.901	1.00
40	ATOM 7.57	1366	N	ILE	370	22.374	44.223	78.162	1.00
	ATOM 6.61	1368	CA	ILE	370	22.296	43.411	76.948	1.00
	ATOM 4.56	1369	CB	ILE	370	22.648	44.186	75.646	1.00
45	ATOM 2.00	1370	CG2	ILE	370	22.640	43.224	74.430	1.00
	ATOM 3.78	1371	CG1	ILE	370	21.621	45.314	75.369	1.00
50	ATOM 5.14	1372	CD1	ILE	370	20.045	44.954	75.518	1.00
	ATOM 9.06	1373	C	ILE	370	23.388	42.327	77.185	1.00
	ATOM 7.80	1374	O	ILE	370	24.530	42.660	77.608	1.00
55	ATOM 8.95	1375	N	LEU	371	23.043	41.047	77.024	1.00
	ATOM 7.58	1377	CA	LEU	371	24.063	39.964	77.236	1.00

	ATOM 5.07	1378	CB	LEU	371	23.569	38.835	78.156	1.00
	ATOM 6.83	1379	CG	LEU	371	23.229	39.260	79.587	1.00
5	ATOM 9.45	1380	CD1	LEU	371	22.753	38.058	80.450	1.00
	ATOM 8.95	1381	CD2	LEU	371	24.465	40.010	80.243	1.00
10	ATOM 7.66	1382	C	LEU	371	24.470	39.428	75.882	1.00
	ATOM 8.35	1383	O	LEU	371	23.703	39.510	74.940	1.00
	ATOM 7.21	1384	N	VAL	372	25.717	38.957	75.780	1.00
15	ATOM 9.26	1386	CA	VAL	372	26.263	38.476	74.528	1.00
	ATOM 10.89	1387	CB	VAL	372	27.536	39.268	74.150	1.00
20	ATOM 8.47	1388	CG1	VAL	372	27.996	38.831	72.754	1.00
	ATOM 5.59	1389	CG2	VAL	372	27.271	40.866	74.213	1.00
	ATOM 7.83	1390	C	VAL	372	26.594	36.970	74.660	1.00
25	ATOM 8.91	1391	O	VAL	372	27.185	36.548	75.643	1.00
	ATOM 7.24	1392	N	SER	373	26.205	36.218	73.637	1.00
30	ATOM 9.76	1394	CA	SER	373	26.384	34.760	73.579	1.00
	ATOM 5.50	1395	CB	SER	373	25.342	34.107	72.660	1.00
	ATOM 8.32	1396	OG	SER	373	25.745	34.322	71.320	1.00
35	ATOM 9.94	1398	C	SER	373	27.744	34.446	72.996	1.00
	ATOM 7.48	1399	O	SER	373	28.465	35.340	72.475	1.00
40	ATOM 10.41	1400	N	ASP	374	28.094	33.165	73.062	1.00
	ATOM 12.58	1402	CA	ASP	374	29.371	32.686	72.546	1.00
	ATOM 16.92	1403	CB	ASP	374	29.578	31.214	72.933	1.00
45	ATOM 21.38	1404	CG	ASP	374	28.619	30.307	72.212	1.00
	ATOM 22.32	1405	OD1	ASP	374	27.403	30.535	72.324	1.00
50	ATOM 27.84	1406	OD2	ASP	374	29.071	29.434	71.444	1.00
	ATOM 14.92	1407	C	ASP	374	29.397	32.866	71.016	1.00
	ATOM 13.69	1408	O	ASP	374	30.467	32.919	70.405	1.00
55	ATOM 12.20	1409	N	THR	375	28.229	32.954	70.365	1.00
	ATOM 11.93	1411	CA	THR	375	28.238	33.202	68.910	1.00

	ATOM 12.01	1412	CB	THR	375	27.130	32.433	68.162	1.00
	ATOM 11.68	1413	OG1	THR	375	25.856	32.721	68.763	1.00
5	ATOM 13.26	1415	CG2	THR	375	27.397	30.929	68.211	1.00
	ATOM 11.66	1416	C	THR	375	28.084	34.695	68.569	1.00
10	ATOM 12.15	1417	O	THR	375	27.801	35.064	67.430	1.00
	ATOM 11.08	1418	N	LEU	376	28.233	35.560	69.565	1.00
	ATOM 11.90	1420	CA	LEU	376	28.072	37.019	69.352	1.00
15	ATOM 11.87	1421	CB	LEU	376	29.142	37.609	68.399	1.00
	ATOM 14.72	1422	CG	LEU	376	30.631	37.276	68.729	1.00
20	ATOM 14.52	1423	CD1	LEU	376	31.563	38.234	67.934	1.00
	ATOM 11.76	1424	CD2	LEU	376	30.918	37.377	70.198	1.00
	ATOM 11.62	1425	C	LEU	376	26.650	37.416	68.889	1.00
25	ATOM 12.23	1426	O	LEU	376	26.465	38.175	67.929	1.00
	ATOM 8.91	1427	N	SER	377	25.653	36.778	69.498	1.00
30	ATOM 8.75	1429	CA	SER	377	24.281	37.152	69.246	1.00
	ATOM 6.43	1430	CB	SER	377	23.395	35.931	68.944	1.00
	ATOM 7.78	1431	OG	SER	377	23.392	35.061	70.052	1.00
35	ATOM 8.80	1433	C	SER	377	23.949	37.847	70.595	1.00
	ATOM 7.17	1434	O	SER	377	24.573	37.565	71.663	1.00
40	ATOM 8.01	1435	N	CYS	378	22.997	38.780	70.553	1.00
	ATOM 8.87	1437	CA	CYS	378	22.639	39.570	71.724	1.00
	ATOM 11.38	1438	CB	CYS	378	22.712	41.064	71.359	1.00
45	ATOM 14.14	1439	SG	CYS	378	24.361	41.659	70.914	1.00
	ATOM 8.65	1440	C	CYS	378	21.227	39.276	72.218	1.00
50	ATOM 10.46	1441	O	CYS	378	20.335	39.062	71.414	1.00
	ATOM 7.74	1442	N	LYS	379	21.057	39.286	73.537	1.00
	ATOM 9.78	1444	CA	LYS	379	19.748	39.098	74.188	1.00
55	ATOM 5.83	1445	CB	LYS	379	19.635	37.717	74.845	1.00
	ATOM 7.52	1446	CG	LYS	379	19.907	36.610	73.796	1.00

	ATOM 5.35	1447	CD	LYS	379	19.441	35.258	74.203	1.00
	ATOM 8.53	1448	CE	LYS	379	19.825	34.309	73.066	1.00
5	ATOM 7.32	1449	NZ	LYS	379	19.129	33.014	73.109	1.00
	ATOM 8.89	1453	C	LYS	379	19.470	40.162	75.244	1.00
10	ATOM 10.66	1454	O	LYS	379	20.363	40.551	76.014	1.00
	ATOM 7.78	1455	N	ILE	380	18.210	40.581	75.337	1.00
	ATOM 6.62	1457	CA	ILE	380	17.808	41.558	76.359	1.00
15	ATOM 5.67	1458	CB	ILE	380	16.334	42.064	76.148	1.00
	ATOM 7.47	1459	CG2	ILE	380	15.981	43.131	77.237	1.00
20	ATOM 8.91	1460	CG1	ILE	380	16.065	42.543	74.719	1.00
	ATOM 8.08	1461	CD1	ILE	380	17.119	43.535	74.160	1.00
	ATOM 7.03	1462	C	ILE	380	17.825	40.803	77.706	1.00
25	ATOM 7.34	1463	O	ILE	380	17.416	39.619	77.776	1.00
	ATOM 6.85	1464	N	ALA	381	18.230	41.493	78.784	1.00
30	ATOM 8.40	1466	CA	ALA	381	18.329	40.932	80.112	1.00
	ATOM 10.10	1467	CB	ALA	381	19.772	40.496	80.365	1.00
	ATOM 10.96	1468	C	ALA	381	17.904	41.940	81.181	1.00
35	ATOM 9.25	1469	O	ALA	381	17.528	43.064	80.865	1.00
	ATOM 13.46	1470	N	ASP	382	17.974	41.525	82.455	1.00
40	ATOM 16.25	1472	CA	ASP	382	17.659	42.358	83.628	1.00
	ATOM 21.02	1473	CB	ASP	382	18.723	43.436	83.849	1.00
	ATOM 29.16	1474	CG	ASP	382	19.811	42.987	84.821	1.00
45	ATOM 31.18	1475	OD1	ASP	382	20.331	41.856	84.688	1.00
	ATOM 32.56	1476	OD2	ASP	382	20.125	43.756	85.749	1.00
50	ATOM 16.63	1477	C	ASP	382	16.283	42.994	83.587	1.00
	ATOM 14.95	1478	O	ASP	382	16.115	44.215	83.506	1.00
	ATOM 15.23	1479	N	PHE	383	15.289	42.126	83.681	1.00
55	ATOM 14.42	1481	CA	PHE	383	13.897	42.495	83.607	1.00
	ATOM 13.10	1482	CB	PHE	383	13.135	41.269	83.123	1.00

	ATOM 11.15	1483	CG	PHE	383	13.552	40.824	81.756	1.00
	ATOM 11.32	1484	CD1	PHE	383	13.092	41.491	80.634	1.00
5	ATOM 11.61	1485	CD2	PHE	383	14.479	39.797	81.591	1.00
	ATOM 9.59	1486	CE1	PHE	383	13.559	41.145	79.387	1.00
10	ATOM 5.95	1487	CE2	PHE	383	14.951	39.452	80.330	1.00
	ATOM 6.03	1488	CZ	PHE	383	14.507	40.102	79.248	1.00
	ATOM 14.50	1489	C	PHE	383	13.306	42.959	84.914	1.00
15	ATOM 15.77	1490	O	PHE	383	12.112	43.049	85.035	1.00
	ATOM 14.37	1491	N	GLY	384	14.149	43.290	85.880	1.00
	ATOM 14.45	1493	CA	GLY	384	13.677	43.701	87.189	1.00
20	ATOM 14.19	1494	C	GLY	384	12.722	44.873	87.230	1.00
	ATOM 13.20	1495	O	GLY	384	11.838	44.934	88.115	1.00
25	ATOM 12.95	1496	N	LEU	385	12.920	45.828	86.326	1.00
	ATOM 13.18	1498	CA	LEU	385	12.053	47.005	86.300	1.00
30	ATOM 13.68	1499	CB	LEU	385	12.886	48.281	86.023	1.00
	ATOM 17.86	1500	CG	LEU	385	13.867	48.544	87.165	1.00
	ATOM 20.90	1501	CD1	LEU	385	14.944	49.590	86.734	1.00
35	ATOM 18.99	1502	CD2	LEU	385	13.095	49.015	88.401	1.00
	ATOM 11.66	1503	C	LEU	385	10.988	46.867	85.253	1.00
40	ATOM 12.38	1504	O	LEU	385	10.221	47.755	85.089	1.00
	ATOM 13.67	1505	N	ALA	386	10.953	45.748	84.523	1.00
	ATOM 13.66	1507	CA	ALA	386	9.965	45.580	83.454	1.00
45	ATOM 13.42	1508	CB	ALA	386	10.243	44.316	82.652	1.00
	ATOM 13.70	1509	C	ALA	386	8.522	45.549	83.999	1.00
	ATOM 14.67	1510	O	ALA	386	8.262	45.036	85.069	1.00
50	ATOM 14.30	1511	N	ARG	387	7.595	46.094	83.234	1.00
	ATOM 15.35	1513	CA	ARG	387	6.206	46.142	83.679	1.00
55	ATOM 14.74	1514	CB	ARG	387	5.880	47.488	84.315	1.00
	ATOM 17.36	1515	CG	ARG	387	6.758	47.859	85.514	1.00

	ATOM	1516	CD	ARG	387	6.533	46.935	86.696	1.00
	12.99								
	ATOM	1517	NE	ARG	387	7.249	47.427	87.855	1.00
	14.52								
5	ATOM	1519	CZ	ARG	387	8.366	46.878	88.316	1.00
	16.69								
	ATOM	1520	NH1	ARG	387	8.891	45.796	87.702	1.00
	14.56								
10	ATOM	1523	NH2	ARG	387	8.955	47.396	89.373	1.00
	13.33								
	ATOM	1526	C	ARG	387	5.272	45.969	82.523	1.00
	15.31								
	ATOM	1527	O	ARG	387	5.515	46.467	81.415	1.00
	13.91								
15	ATOM	1528	N	LEU	388	4.176	45.272	82.811	1.00
	17.64								
	ATOM	1530	CA	LEU	388	3.129	45.049	81.846	1.00
	20.19								
20	ATOM	1531	CB	LEU	388	2.219	43.891	82.280	1.00
	21.96								
	ATOM	1532	CG	LEU	388	1.040	43.441	81.406	1.00
	21.86								
	ATOM	1533	CD1	LEU	388	-0.225	44.187	81.738	1.00
	26.99								
25	ATOM	1534	CD2	LEU	388	1.340	43.579	79.946	1.00
	24.42								
	ATOM	1535	C	LEU	388	2.346	46.339	81.883	1.00
	22.45								
30	ATOM	1536	O	LEU	388	1.939	46.799	82.934	1.00
	22.82								
	ATOM	1537	N	ILE	389	2.126	46.903	80.710	1.00
	25.77								
	ATOM	1539	CA	ILE	389	1.391	48.147	80.569	1.00
	31.17								
35	ATOM	1540	CB	ILE	389	2.007	48.973	79.406	1.00
	32.68								
	ATOM	1541	CG2	ILE	389	0.977	49.811	78.700	1.00
	35.18								
40	ATOM	1542	CG1	ILE	389	3.199	49.793	79.906	1.00
	33.70								
	ATOM	1543	CD1	ILE	389	3.234	50.008	81.385	1.00
	33.09								
	ATOM	1544	C	ILE	389	-0.082	47.830	80.310	1.00
	33.94								
45	ATOM	1545	O	ILE	389	-0.479	47.374	79.223	1.00
	33.18								
	ATOM	1546	N	GLU	390	-0.884	48.033	81.343	1.00
	37.88								
50	ATOM	1548	CA	GLU	390	-2.326	47.791	81.277	1.00
	42.55								
	ATOM	1549	CB	GLU	390	-2.922	47.974	82.674	1.00
	45.03								
	ATOM	1550	CG	GLU	390	-1.924	47.709	83.827	1.00
	47.42								
55	ATOM	1551	CD	GLU	390	-1.907	46.263	84.320	1.00
	49.42								
	ATOM	1552	OE1	GLU	390	-2.865	45.504	84.044	1.00
	52.67								

	ATOM 49.76	1553	OE2	GLU	390	-0.941	45.888	85.023	1.00
	ATOM 44.19	1554	C	GLU	390	-2.891	48.829	80.297	1.00
5	ATOM 45.01	1555	O	GLU	390	-3.263	48.501	79.169	1.00
	ATOM 45.67	1556	N	ASP	391	-2.899	50.094	80.727	1.00
10	ATOM 46.27	1558	CA	ASP	391	-3.348	51.230	79.909	1.00
	ATOM 46.38	1559	CB	ASP	391	-4.036	52.278	80.795	1.00
	ATOM 46.67	1560	CG	ASP	391	-5.096	51.673	81.721	1.00
15	ATOM 45.67	1561	OD1	ASP	391	-4.768	50.776	82.530	1.00
	ATOM 47.09	1562	OD2	ASP	391	-6.254	52.123	81.663	1.00
20	ATOM 46.49	1563	C	ASP	391	-2.027	51.786	79.353	1.00
	ATOM 49.17	1564	O	ASP	391	-0.983	51.277	79.719	1.00
	ATOM 45.78	1565	N	ASN	392	-2.035	52.861	78.563	1.00
25	ATOM 44.41	1567	CA	ASN	392	-0.785	53.403	77.968	1.00
	ATOM 46.14	1568	CB	ASN	392	-1.056	54.720	77.217	1.00
30	ATOM 47.37	1569	CG	ASN	392	0.185	55.244	76.462	1.00
	ATOM 47.96	1570	OD1	ASN	392	0.403	56.459	76.344	1.00
	ATOM 48.86	1571	ND2	ASN	392	1.001	54.325	75.958	1.00
35	ATOM 42.14	1574	C	ASN	392	0.508	53.579	78.775	1.00
	ATOM 43.11	1575	O	ASN	392	1.602	53.302	78.249	1.00
40	ATOM 39.10	1576	N	GLU	393	0.439	54.012	80.033	1.00
	ATOM 36.60	1578	CA	GLU	393	1.686	54.237	80.765	1.00
	ATOM 36.66	1579	CB	GLU	393	2.077	55.731	80.683	1.00
45	ATOM 39.54	1580	CG	GLU	393	1.148	56.694	81.381	1.00
	ATOM 42.34	1581	CD	GLU	393	1.588	58.158	81.306	1.00
50	ATOM 42.59	1582	OE1	GLU	393	1.618	58.811	82.369	1.00
	ATOM 44.17	1583	OE2	GLU	393	1.862	58.676	80.197	1.00
	ATOM 34.46	1584	C	GLU	393	1.715	53.797	82.253	1.00
55	ATOM 35.21	1585	O	GLU	393	0.769	53.675	82.965	1.00
	ATOM 29.11	1586	N	PTR	394	3.001	53.540	82.661	1.00

	ATOM 26.42	1587	CA	PTR	394	3.298	53.169	84.025	1.00
	ATOM 24.90	1588	C	PTR	394	3.931	54.436	84.666	1.00
5	ATOM 23.07	1589	O	PTR	394	4.763	55.076	84.070	1.00
	ATOM 23.81	1590	CB	PTR	394	4.362	52.061	83.972	1.00
10	ATOM 25.37	1591	CG	PTR	394	4.671	51.487	85.340	1.00
	ATOM 25.42	1592	CD1	PTR	394	3.906	50.463	85.860	1.00
	ATOM 26.36	1593	CD2	PTR	394	5.728	51.987	86.078	1.00
15	ATOM 28.45	1594	CE1	PTR	394	4.220	49.955	87.118	1.00
	ATOM 29.97	1595	CE2	PTR	394	6.061	51.496	87.341	1.00
20	ATOM 30.84	1596	CZ	PTR	394	5.286	50.470	87.832	1.00
	ATOM 38.55	1597	OH	PTR	394	5.638	49.945	89.136	1.00
	ATOM 40.34	1598	P	PTR	394	6.362	50.808	90.275	1.00
25	ATOM 41.04	1599	O1P	PTR	394	7.387	51.592	89.615	1.00
	ATOM 41.13	1600	O2P	PTR	394	6.976	49.958	91.281	1.00
30	ATOM 44.63	1601	O3P	PTR	394	5.391	51.756	90.903	1.00
	ATOM 25.26	1602	N	THR	395	3.561	54.729	85.902	1.00
	ATOM 26.22	1604	CA	THR	395	4.088	55.931	86.611	1.00
35	ATOM 27.32	1605	CB	THR	395	2.923	56.896	87.089	1.00
	ATOM 24.61	1606	OG1	THR	395	2.050	57.159	85.991	1.00
40	ATOM 26.90	1608	CG2	THR	395	3.476	58.262	87.597	1.00
	ATOM 27.47	1609	C	THR	395	4.783	55.378	87.821	1.00
	ATOM 28.67	1610	O	THR	395	4.163	54.678	88.622	1.00
45	ATOM 28.84	1611	N	ALA	396	6.082	55.628	87.937	1.00
	ATOM 31.81	1613	CA	ALA	396	6.859	55.130	89.085	1.00
50	ATOM 30.56	1614	CB	ALA	396	8.350	55.325	88.839	1.00
	ATOM 34.00	1615	C	ALA	396	6.460	55.843	90.382	1.00
	ATOM 33.88	1616	O	ALA	396	5.639	56.762	90.363	1.00
55	ATOM 37.57	1617	N	ALA	397	7.058	55.432	91.500	1.00
	ATOM 40.37	1619	CA	ALA	397	6.773	56.045	92.803	1.00



	ATOM 42.31	1620	CB	ALA	397	7.104	55.068	93.922	1.00
	ATOM 42.80	1621	C	ALA	397	7.583	57.335	92.944	1.00
5	ATOM 42.60	1622	O	ALA	397	8.743	57.405	92.539	1.00
	ATOM 45.77	1623	N	GLU	398	6.970	58.362	93.528	1.00
10	ATOM 47.84	1625	CA	GLU	398	7.610	59.683	93.673	1.00
	ATOM 50.12	1626	CB	GLU	398	6.734	60.601	94.523	1.00
	ATOM 53.67	1627	CG	GLU	398	5.373	60.880	93.884	1.00
15	ATOM 55.50	1628	CD	GLU	398	5.490	61.473	92.490	1.00
	ATOM 56.86	1629	OE1	GLU	398	5.992	62.612	92.377	1.00
20	ATOM 56.88	1630	OE2	GLU	398	5.085	60.805	91.512	1.00
	ATOM 47.14	1631	C	GLU	398	9.082	59.802	94.094	1.00
	ATOM 48.42	1632	O	GLU	398	9.768	60.765	93.719	1.00
25	ATOM 46.48	1633	N	GLY	399	9.585	58.839	94.859	1.00
	ATOM 44.00	1635	CA	GLY	399	10.982	58.891	95.266	1.00
30	ATOM 41.93	1636	C	GLY	399	11.881	58.026	94.394	1.00
	ATOM 43.45	1637	O	GLY	399	13.058	57.832	94.698	1.00
	ATOM 40.42	1638	N	ALA	400	11.335	57.512	93.296	1.00
35	ATOM 38.09	1640	CA	ALA	400	12.093	56.644	92.391	1.00
	ATOM 38.53	1641	CB	ALA	400	11.142	55.857	91.493	1.00
40	ATOM 34.64	1642	C	ALA	400	13.103	57.412	91.554	1.00
	ATOM 35.67	1643	O	ALA	400	12.784	58.434	90.969	1.00
	ATOM 31.89	1644	N	ALA	401	14.338	56.925	91.529	1.00
45	ATOM 29.60	1646	CA	ALA	401	15.406	57.567	90.768	1.00
	ATOM 29.17	1647	CB	ALA	401	16.568	57.955	91.704	1.00
50	ATOM 27.73	1648	C	ALA	401	15.888	56.645	89.639	1.00
	ATOM 29.01	1649	O	ALA	401	15.948	55.412	89.786	1.00
	ATOM 24.12	1650	N	PHE	402	16.194	57.245	88.496	1.00
55	ATOM 22.37	1652	CA	PHE	402	16.642	56.507	87.307	1.00
	ATOM 22.95	1653	CB	PHE	402	15.519	56.502	86.279	1.00

	ATOM	1654	CG	PHE	402	14.274	55.838	86.781	1.00
	24.95								
	ATOM	1655	CD1	PHE	402	14.171	54.443	86.775	1.00
	25.08								
5	ATOM	1656	CD2	PHE	402	13.238	56.598	87.349	1.00
	25.66								
	ATOM	1657	CE1	PHE	402	13.056	53.804	87.336	1.00
	26.56								
10	ATOM	1658	CE2	PHE	402	12.117	55.971	87.918	1.00
	25.82								
	ATOM	1659	CZ	PHE	402	12.028	54.572	87.910	1.00
	26.72								
	ATOM	1660	C	PHE	402	17.903	57.126	86.736	1.00
	19.57								
15	ATOM	1661	O	PHE	402	18.177	58.296	86.994	1.00
	20.18								
	ATOM	1662	N	PRO	403	18.722	56.338	86.020	1.00
	17.47								
20	ATOM	1663	CD	PRO	403	18.495	54.940	85.630	1.00
	18.55								
	ATOM	1664	CA	PRO	403	19.966	56.858	85.428	1.00
	16.70								
	ATOM	1665	CB	PRO	403	20.540	55.657	84.674	1.00
	16.97								
25	ATOM	1666	CG	PRO	403	19.910	54.447	85.358	1.00
	20.19								
	ATOM	1667	C	PRO	403	19.587	57.948	84.451	1.00
	15.54								
30	ATOM	1668	O	PRO	403	18.954	57.698	83.415	1.00
	14.87								
	ATOM	1669	N	ILE	404	19.946	59.173	84.797	1.00
	14.66								
	ATOM	1671	CA	ILE	404	19.611	60.333	83.977	1.00
	13.68								
35	ATOM	1672	CB	ILE	404	20.166	61.635	84.611	1.00
	13.64								
	ATOM	1673	CG2	ILE	404	20.070	62.847	83.635	1.00
	13.49								
40	ATOM	1674	CG1	ILE	404	19.452	61.908	85.942	1.00
	14.28								
	ATOM	1675	CD1	ILE	404	17.965	61.923	85.854	1.00
	21.89								
	ATOM	1676	C	ILE	404	19.988	60.283	82.514	1.00
	10.49								
45	ATOM	1677	O	ILE	404	19.189	60.623	81.657	1.00
	13.39								
	ATOM	1678	N	LYS	405	21.211	59.857	82.213	1.00
	10.10								
50	ATOM	1680	CA	LYS	405	21.691	59.833	80.819	1.00
	8.60								
	ATOM	1681	CB	LYS	405	23.200	59.603	80.798	1.00
	8.67								
	ATOM	1682	CG	LYS	405	24.036	60.751	81.412	1.00
	11.05								
55	ATOM	1683	CD	LYS	405	25.544	60.429	81.442	1.00
	15.41								
	ATOM	1684	CE	LYS	405	26.382	61.629	81.950	1.00
	18.38								

	ATOM 23.91	1685	NZ	LYS	405	27.786	61.702	81.303	1.00
	ATOM 7.88	1689	C	LYS	405	21.000	58.872	79.872	1.00
5	ATOM 7.04	1690	O	LYS	405	21.058	59.069	78.644	1.00
	ATOM 8.72	1691	N	TRP	406	20.400	57.804	80.412	1.00
10	ATOM 9.83	1693	CA	TRP	406	19.698	56.811	79.573	1.00
	ATOM 11.56	1694	CB	TRP	406	20.016	55.381	80.039	1.00
	ATOM 10.68	1695	CG	TRP	406	21.358	54.884	79.663	1.00
15	ATOM 10.60	1696	CD2	TRP	406	22.573	55.093	80.384	1.00
	ATOM 10.53	1697	CE2	TRP	406	23.582	54.422	79.676	1.00
20	ATOM 7.38	1698	CE3	TRP	406	22.896	55.786	81.554	1.00
	ATOM 13.93	1699	CD1	TRP	406	21.666	54.138	78.588	1.00
	ATOM 14.24	1700	NE1	TRP	406	23.006	53.854	78.585	1.00
25	ATOM 11.04	1702	CZ2	TRP	406	24.907	54.424	80.098	1.00
	ATOM 10.50	1703	CZ3	TRP	406	24.215	55.786	81.984	1.00
30	ATOM 7.77	1704	CH2	TRP	406	25.208	55.112	81.261	1.00
	ATOM 11.42	1705	C	TRP	406	18.181	56.919	79.606	1.00
	ATOM 11.43	1706	O	TRP	406	17.497	56.267	78.824	1.00
35	ATOM 10.56	1707	N	THR	407	17.652	57.725	80.524	1.00
	ATOM 11.52	1709	CA	THR	407	16.222	57.848	80.706	1.00
40	ATOM 10.98	1710	CB	THR	407	15.911	57.899	82.231	1.00
	ATOM 12.19	1711	OG1	THR	407	16.569	56.798	82.877	1.00
	ATOM 11.63	1713	CG2	THR	407	14.412	57.806	82.508	1.00
45	ATOM 11.66	1714	C	THR	407	15.555	59.015	79.938	1.00
	ATOM 12.05	1715	O	THR	407	16.073	60.099	79.919	1.00
50	ATOM 9.19	1716	N	ALA	408	14.409	58.746	79.304	1.00
	ATOM 9.76	1718	CA	ALA	408	13.645	59.741	78.507	1.00
	ATOM 10.54	1719	CB	ALA	408	12.411	59.090	77.897	1.00
55	ATOM 9.45	1720	C	ALA	408	13.209	60.874	79.419	1.00
	ATOM 10.32	1721	O	ALA	408	12.950	60.646	80.558	1.00

	ATOM	1722	N	PRO	409	13.132	62.115	78.907	1.00
	10.88								
	ATOM	1723	CD	PRO	409	13.410	62.579	77.551	1.00
	11.22								
5	ATOM	1724	CA	PRO	409	12.731	63.248	79.731	1.00
	13.35								
	ATOM	1725	CB	PRO	409	12.683	64.396	78.716	1.00
	13.57								
10	ATOM	1726	CG	PRO	409	13.756	63.998	77.791	1.00
	15.33								
	ATOM	1727	C	PRO	409	11.422	63.084	80.469	1.00
	13.71								
	ATOM	1728	O	PRO	409	11.356	63.418	81.654	1.00
	13.85								
15	ATOM	1729	N	GLU	410	10.392	62.555	79.789	1.00
	14.45								
	ATOM	1731	CA	GLU	410	9.074	62.375	80.435	1.00
	15.87								
	ATOM	1732	CB	GLU	410	7.999	61.873	79.451	1.00
	15.43								
20	ATOM	1733	CG	GLU	410	8.163	60.399	78.938	1.00
	16.98								
	ATOM	1734	CD	GLU	410	9.074	60.243	77.711	1.00
	16.27								
25	ATOM	1735	OE1	GLU	410	9.822	61.196	77.351	1.00
	17.12								
	ATOM	1736	OE2	GLU	410	9.054	59.155	77.094	1.00
	14.45								
	ATOM	1737	C	GLU	410	9.163	61.485	81.641	1.00
	16.20								
30	ATOM	1738	O	GLU	410	8.487	61.725	82.641	1.00
	15.55								
	ATOM	1739	N	ALA	411	10.064	60.490	81.597	1.00
	16.98								
35	ATOM	1741	CA	ALA	411	10.245	59.586	82.743	1.00
	18.93								
	ATOM	1742	CB	ALA	411	11.019	58.316	82.320	1.00
	18.93								
	ATOM	1743	C	ALA	411	10.995	60.298	83.877	1.00
	20.04								
40	ATOM	1744	O	ALA	411	10.733	60.065	85.080	1.00
	20.20								
	ATOM	1745	N	ILE	412	12.000	61.102	83.513	1.00
	19.47								
45	ATOM	1747	CA	ILE	412	12.764	61.853	84.542	1.00
	19.22								
	ATOM	1748	CB	ILE	412	14.015	62.534	83.940	1.00
	19.14								
	ATOM	1749	CG2	ILE	412	14.636	63.570	84.938	1.00
	19.48								
50	ATOM	1750	CG1	ILE	412	15.000	61.489	83.436	1.00
	16.00								
	ATOM	1751	CD1	ILE	412	15.987	62.079	82.388	1.00
	17.37								
55	ATOM	1752	C	ILE	412	11.896	62.964	85.178	1.00
	18.91								
	ATOM	1753	O	ILE	412	11.864	63.141	86.391	1.00
	19.37								

	ATOM	1754	N	ASN	413	11.172	63.700	84.353	1.00
	19.40								
	ATOM	1756	CA	ASN	413	10.334	64.805	84.878	1.00
	21.43								
5	ATOM	1757	CB	ASN	413	10.085	65.819	83.770	1.00
	18.83								
	ATOM	1758	CG	ASN	413	11.381	66.386	83.221	1.00
	19.10								
10	ATOM	1759	OD1	ASN	413	12.332	66.515	83.933	1.00
	19.65								
	ATOM	1760	ND2	ASN	413	11.409	66.692	81.955	1.00
	20.84								
	ATOM	1763	C	ASN	413	8.990	64.407	85.524	1.00
	22.30								
15	ATOM	1764	O	ASN	413	8.527	65.040	86.478	1.00
	22.79								
	ATOM	1765	N	TYR	414	8.402	63.303	85.060	1.00
	22.84								
20	ATOM	1767	CA	TYR	414	7.105	62.891	85.555	1.00
	23.38								
	ATOM	1768	CB	TYR	414	6.085	63.121	84.441	1.00
	25.46								
	ATOM	1769	CG	TYR	414	6.276	64.428	83.670	1.00
	29.64								
25	ATOM	1770	CD1	TYR	414	6.421	65.649	84.338	1.00
	30.70								
	ATOM	1771	CE1	TYR	414	6.547	66.856	83.632	1.00
	31.19								
30	ATOM	1772	CD2	TYR	414	6.267	64.439	82.278	1.00
	29.95								
	ATOM	1773	CE2	TYR	414	6.385	65.621	81.566	1.00
	32.57								
	ATOM	1774	CZ	TYR	414	6.522	66.831	82.247	1.00
	33.21								
35	ATOM	1775	OH	TYR	414	6.616	68.018	81.534	1.00
	34.76								
	ATOM	1777	C	TYR	414	6.934	61.478	86.102	1.00
	23.24								
40	ATOM	1778	O	TYR	414	5.872	61.162	86.566	1.00
	25.90								
	ATOM	1779	N	GLY	415	7.962	60.634	86.046	1.00
	21.41								
	ATOM	1781	CA	GLY	415	7.819	59.265	86.524	1.00
	21.21								
45	ATOM	1782	C	GLY	415	7.029	58.446	85.492	1.00
	20.23								
	ATOM	1783	O	GLY	415	6.758	57.279	85.671	1.00
	21.38								
50	ATOM	1784	N	THR	416	6.787	59.049	84.349	1.00
	20.26								
	ATOM	1786	CA	THR	416	6.014	58.442	83.285	1.00
	21.50								
	ATOM	1787	CB	THR	416	5.163	59.566	82.611	1.00
	23.40								
55	ATOM	1788	OG1	THR	416	3.916	59.688	83.329	1.00
	27.04								
	ATOM	1790	CG2	THR	416	4.890	59.281	81.162	1.00
	26.75								

5	ATOM 19.43	1791	C	THR	416	6.836	57.629	82.252	1.00
	ATOM 16.41	1792	O	THR	416	7.646	58.184	81.497	1.00
	ATOM 16.02	1793	N	PHE	417	6.575	56.320	82.209	1.00
10	ATOM 14.98	1795	CA	PHE	417	7.259	55.414	81.278	1.00
	ATOM 14.22	1796	CB	PHE	417	7.953	54.294	82.034	1.00
	ATOM 13.32	1797	CG	PHE	417	9.114	54.722	82.869	1.00
15	ATOM 12.88	1798	CD1	PHE	417	8.929	55.042	84.205	1.00
	ATOM 11.83	1799	CD2	PHE	417	10.414	54.690	82.352	1.00
	ATOM 16.16	1800	CE1	PHE	417	10.029	55.315	85.024	1.00
20	ATOM 9.52	1801	CE2	PHE	417	11.500	54.953	83.152	1.00
	ATOM 12.45	1802	CZ	PHE	417	11.322	55.264	84.488	1.00
	ATOM 14.56	1803	C	PHE	417	6.333	54.716	80.290	1.00
25	ATOM 14.80	1804	O	PHE	417	5.238	54.220	80.662	1.00
	ATOM 13.23	1805	N	THR	418	6.727	54.697	79.023	1.00
	ATOM 13.01	1807	CA	THR	418	5.959	53.962	78.016	1.00
30	ATOM 14.60	1808	CB	THR	418	5.059	54.873	77.061	1.00
	ATOM 16.70	1809	OG1	THR	418	5.907	55.558	76.151	1.00
	ATOM 11.08	1811	CG2	THR	418	4.217	55.892	77.866	1.00
35	ATOM 11.75	1812	C	THR	418	7.003	53.283	77.163	1.00
	ATOM 11.33	1813	O	THR	418	8.216	53.410	77.403	1.00
	ATOM 11.63	1814	N	ILE	419	6.555	52.534	76.167	1.00
40	ATOM 10.87	1816	CA	ILE	419	7.501	51.869	75.297	1.00
	ATOM 12.79	1817	CB	ILE	419	6.801	50.910	74.297	1.00
	ATOM 9.94	1818	CG2	ILE	419	5.976	51.677	73.171	1.00
45	ATOM 9.84	1819	CG1	ILE	419	7.857	49.987	73.647	1.00
	ATOM 9.11	1820	CD1	ILE	419	8.638	49.121	74.690	1.00
	ATOM 12.14	1821	C	ILE	419	8.363	52.931	74.574	1.00
50	ATOM 11.23	1822	O	ILE	419	9.524	52.659	74.185	1.00
	ATOM 8.11	1823	N	LYS	420	7.826	54.154	74.460	1.00

5	ATOM 7.87	1825	CA	LYS	420	8.552	55.237	73.788	1.00
	ATOM 6.52	1826	CB	LYS	420	7.615	56.403	73.489	1.00
	ATOM 5.66	1827	CG	LYS	420	6.541	56.046	72.445	1.00
	ATOM 5.00	1828	CD	LYS	420	7.131	55.633	71.125	1.00
	ATOM 4.07	1829	CE	LYS	420	5.982	55.321	70.158	1.00
10	ATOM 5.92	1830	NZ	LYS	420	6.425	54.699	68.865	1.00
	ATOM 6.25	1834	C	LYS	420	9.711	55.725	74.645	1.00
	ATOM 9.15	1835	O	LYS	420	10.633	56.357	74.124	1.00
15	ATOM 3.44	1836	N	SER	421	9.622	55.508	75.954	0.84
	ATOM 7.00	1838	CA	SER	421	10.712	55.855	76.853	0.84
	ATOM 5.36	1839	CB	SER	421	10.320	55.736	78.334	0.84
	ATOM 11.88	1840	OG	SER	421	9.199	56.532	78.638	0.84
20	ATOM 6.33	1842	C	SER	421	11.825	54.875	76.566	0.84
	ATOM 5.12	1843	O	SER	421	12.967	55.220	76.622	0.84
	ATOM 9.14	1844	N	ASP	422	11.484	53.607	76.334	1.00
30	ATOM 8.70	1846	CA	ASP	422	12.517	52.597	76.025	1.00
	ATOM 12.07	1847	CB	ASP	422	11.885	51.196	75.904	1.00
	ATOM 12.39	1848	CG	ASP	422	11.572	50.563	77.259	1.00
35	ATOM 10.34	1849	OD1	ASP	422	12.056	51.022	78.327	1.00
	ATOM 11.32	1850	OD2	ASP	422	10.816	49.582	77.246	1.00
	ATOM 6.58	1851	C	ASP	422	13.184	52.950	74.686	1.00
40	ATOM 8.49	1852	O	ASP	422	14.369	52.729	74.503	1.00
	ATOM 5.50	1853	N	VAL	423	12.406	53.490	73.743	1.00
	ATOM 6.60	1855	CA	VAL	423	12.958	53.869	72.455	1.00
45	ATOM 5.46	1856	CB	VAL	423	11.861	54.360	71.466	1.00
	ATOM 6.60	1857	CG1	VAL	423	12.489	55.077	70.272	1.00
	ATOM 7.26	1858	CG2	VAL	423	11.039	53.179	70.942	1.00
50	ATOM 7.12	1859	C	VAL	423	14.038	54.958	72.656	1.00
	ATOM 5.42	1860	O	VAL	423	15.065	54.917	72.020	1.00

	ATOM 6.23	1861	N	TRP	424	13.783	55.910	73.554	1.00
	ATOM 6.55	1863	CA	TRP	424	14.763	56.979	73.845	1.00
5	ATOM 5.57	1864	CB	TRP	424	14.208	57.882	74.954	1.00
	ATOM 7.05	1865	CG	TRP	424	15.192	58.959	75.346	1.00
10	ATOM 6.30	1866	CD2	TRP	424	15.151	60.335	74.967	1.00
	ATOM 8.37	1867	CE2	TRP	424	16.308	60.951	75.529	1.00
	ATOM 7.64	1868	CE3	TRP	424	14.245	61.121	74.229	1.00
15	ATOM 5.60	1869	CD1	TRP	424	16.318	58.800	76.109	1.00
	ATOM 5.35	1870	NE1	TRP	424	16.980	59.990	76.219	1.00
20	ATOM 10.22	1872	CZ2	TRP	424	16.590	62.315	75.375	1.00
	ATOM 9.61	1873	CZ3	TRP	424	14.518	62.503	74.075	1.00
	ATOM 7.29	1874	CH2	TRP	424	15.680	63.078	74.643	1.00
25	ATOM 6.20	1875	C	TRP	424	16.060	56.280	74.363	1.00
	ATOM 7.99	1876	O	TRP	424	17.158	56.541	73.879	1.00
30	ATOM 3.20	1877	N	SER	425	15.885	55.412	75.355	0.74
	ATOM 4.31	1879	CA	SER	425	16.990	54.663	75.922	0.74
	ATOM 2.00	1880	CB	SER	425	16.495	53.701	77.008	0.74
35	ATOM 2.00	1881	OG	SER	425	15.803	54.395	78.026	0.74
	ATOM 3.33	1883	C	SER	425	17.737	53.913	74.846	0.74
40	ATOM 2.42	1884	O	SER	425	18.950	53.850	74.888	0.74
	ATOM 5.45	1885	N	PHE	426	17.007	53.293	73.903	1.00
	ATOM 6.49	1887	CA	PHE	426	17.657	52.573	72.797	1.00
45	ATOM 4.63	1888	CB	PHE	426	16.623	51.923	71.873	1.00
	ATOM 7.25	1889	CG	PHE	426	17.220	51.113	70.753	1.00
50	ATOM 7.49	1890	CD1	PHE	426	17.757	49.839	70.993	1.00
	ATOM 5.54	1891	CD2	PHE	426	17.257	51.607	69.464	1.00
	ATOM 7.13	1892	CE1	PHE	426	18.321	49.102	69.956	1.00
55	ATOM 7.86	1893	CE2	PHE	426	17.820	50.860	68.434	1.00
	ATOM 5.60	1894	CZ	PHE	426	18.354	49.600	68.698	1.00



	ATOM 8.58	1895	C	PHE	426	18.584	53.554	72.015	1.00
	ATOM 5.97	1896	O	PHE	426	19.686	53.185	71.563	1.00
5	ATOM 6.15	1897	N	GLY	427	18.113	54.784	71.810	1.00
	ATOM 6.03	1899	CA	GLY	427	18.949	55.784	71.131	1.00
10	ATOM 4.54	1900	C	GLY	427	20.276	55.953	71.872	1.00
	ATOM 5.34	1901	O	GLY	427	21.341	55.962	71.238	1.00
	ATOM 4.21	1902	N	ILE	428	20.215	56.014	73.195	1.00
15	ATOM 3.97	1904	CA	ILE	428	21.401	56.164	74.015	1.00
	ATOM 4.96	1905	CB	ILE	428	21.090	56.406	75.483	1.00
20	ATOM 2.19	1906	CG2	ILE	428	22.463	56.522	76.258	1.00
	ATOM 7.36	1907	CG1	ILE	428	20.164	57.671	75.681	1.00
	ATOM 3.13	1908	CD1	ILE	428	20.782	58.976	75.203	1.00
25	ATOM 8.27	1909	C	ILE	428	22.297	54.873	73.914	1.00
	ATOM 4.68	1910	O	ILE	428	23.547	54.933	73.888	1.00
30	ATOM 7.27	1911	N	LEU	429	21.637	53.711	73.972	1.00
	ATOM 6.62	1913	CA	LEU	429	22.327	52.410	73.827	1.00
	ATOM 6.35	1914	CB	LEU	429	21.296	51.253	73.959	1.00
35	ATOM 11.27	1915	CG	LEU	429	21.845	49.877	74.329	1.00
	ATOM 8.31	1916	CD1	LEU	429	20.673	48.933	74.756	1.00
40	ATOM 12.01	1917	CD2	LEU	429	22.560	49.308	73.139	1.00
	ATOM 6.20	1918	C	LEU	429	23.106	52.375	72.491	1.00
	ATOM 5.46	1919	O	LEU	429	24.256	51.910	72.453	1.00
45	ATOM 6.35	1920	N	LEU	430	22.530	52.859	71.384	1.00
	ATOM 7.66	1922	CA	LEU	430	23.257	52.883	70.118	1.00
50	ATOM 9.11	1923	CB	LEU	430	22.405	53.531	69.001	1.00
	ATOM 12.71	1924	CG	LEU	430	21.088	52.860	68.575	1.00
	ATOM 12.19	1925	CD1	LEU	430	20.402	53.710	67.469	1.00
55	ATOM 11.08	1926	CD2	LEU	430	21.364	51.433	68.038	1.00
	ATOM 8.68	1927	C	LEU	430	24.609	53.674	70.239	1.00

	ATOM 7.43	1928	O	LEU	430	25.574	53.393	69.501	1.00
	ATOM 8.14	1929	N	THR	431	24.651	54.720	71.075	1.00
5	ATOM 8.38	1931	CA	THR	431	25.921	55.506	71.257	1.00
	ATOM 4.90	1932	CB	THR	431	25.741	56.859	72.021	1.00
10	ATOM 3.60	1933	OG1	THR	431	25.469	56.643	73.392	1.00
	ATOM 5.55	1935	CG2	THR	431	24.529	57.704	71.425	1.00
	ATOM 8.62	1936	C	THR	431	26.923	54.631	72.005	1.00
15	ATOM 9.17	1937	O	THR	431	28.125	54.631	71.695	1.00
	ATOM 7.90	1938	N	GLU	432	26.424	53.860	72.967	1.00
20	ATOM 10.08	1940	CA	GLU	432	27.328	52.951	73.694	1.00
	ATOM 5.99	1941	CB	GLU	432	26.627	52.186	74.815	1.00
	ATOM 10.88	1942	CG	GLU	432	26.143	53.057	75.932	1.00
25	ATOM 9.59	1943	CD	GLU	432	25.363	52.313	76.946	1.00
	ATOM 10.03	1944	OE1	GLU	432	24.175	52.004	76.677	1.00
30	ATOM 11.37	1945	OE2	GLU	432	25.905	52.072	78.050	1.00
	ATOM 8.62	1946	C	GLU	432	27.926	51.942	72.745	1.00
	ATOM 11.14	1947	O	GLU	432	29.097	51.536	72.916	1.00
35	ATOM 8.61	1948	N	ILE	433	27.137	51.487	71.778	1.00
	ATOM 10.01	1950	CA	ILE	433	27.604	50.462	70.831	1.00
40	ATOM 10.36	1951	CB	ILE	433	26.413	49.891	69.976	1.00
	ATOM 9.69	1952	CG2	ILE	433	26.928	49.148	68.750	1.00
	ATOM 7.16	1953	CG1	ILE	433	25.555	48.915	70.793	1.00
45	ATOM 9.87	1954	CD1	ILE	433	24.341	48.431	69.943	1.00
	ATOM 13.45	1955	C	ILE	433	28.702	50.975	69.916	1.00
50	ATOM 13.31	1956	O	ILE	433	29.819	50.391	69.800	1.00
	ATOM 10.37	1957	N	VAL	434	28.426	52.119	69.304	1.00
	ATOM 13.65	1959	CA	VAL	434	29.357	52.736	68.363	1.00
55	ATOM 14.15	1960	CB	VAL	434	28.624	53.819	67.515	1.00
	ATOM 12.09	1961	CG1	VAL	434	28.526	55.101	68.291	1.00

5	ATOM 17.74	1962	CG2	VAL	434	29.335	54.029	66.212	1.00
	ATOM 12.97	1963	C	VAL	434	30.635	53.329	69.002	1.00
	ATOM 17.99	1964	O	VAL	434	31.570	53.674	68.308	1.00
	ATOM 11.64	1965	N	THR	435	30.646	53.500	70.314	1.00
	ATOM 11.78	1967	CA	THR	435	31.815	54.028	70.993	1.00
10	ATOM 12.27	1968	CB	THR	435	31.458	55.206	71.945	1.00
	ATOM 10.57	1969	OG1	THR	435	30.573	54.737	72.967	1.00
	ATOM 8.79	1971	CG2	THR	435	30.795	56.338	71.192	1.00
15	ATOM 12.81	1972	C	THR	435	32.475	52.911	71.816	1.00
	ATOM 10.66	1973	O	THR	435	33.285	53.166	72.710	1.00
	ATOM 12.55	1974	N	HIS	436	32.037	51.667	71.581	1.00
	ATOM 13.21	1976	CA	HIS	436	32.599	50.520	72.294	1.00
20	ATOM 16.87	1977	CB	HIS	436	34.044	50.249	71.838	1.00
	ATOM 18.59	1978	CG	HIS	436	34.139	49.679	70.445	1.00
	ATOM 20.86	1979	CD2	HIS	436	34.228	50.288	69.233	1.00
25	ATOM 20.34	1980	ND1	HIS	436	34.148	48.318	70.189	1.00
	ATOM 19.64	1982	CE1	HIS	436	34.241	48.112	68.884	1.00
	ATOM 21.05	1983	NE2	HIS	436	34.287	49.287	68.280	1.00
	ATOM 13.02	1985	C	HIS	436	32.485	50.659	73.793	1.00
30	ATOM 12.87	1986	O	HIS	436	33.406	50.445	74.542	1.00
	ATOM 9.87	1987	N	GLY	437	31.297	51.065	74.231	1.00
	ATOM 9.32	1989	CA	GLY	437	31.041	51.176	75.644	1.00
35	ATOM 10.65	1990	C	GLY	437	31.324	52.449	76.409	1.00
	ATOM 14.03	1991	O	GLY	437	31.235	52.408	77.628	1.00
	ATOM 7.95	1992	N	ARG	438	31.619	53.559	75.744	0.58
40	ATOM 9.13	1994	CA	ARG	438	31.865	54.845	76.434	0.58
	ATOM 7.13	1995	CB	ARG	438	32.379	55.911	75.427	0.58
	ATOM 13.47	1996	CG	ARG	438	32.767	57.291	76.016	0.58
45	ATOM 15.92	1997	CD	ARG	438	33.308	58.331	74.947	0.58

	ATOM 20.59	1998	NE	ARG	438	34.144	59.360	75.592	0.58
	ATOM 22.05	2000	CZ	ARG	438	34.649	60.453	75.009	0.58
5	ATOM 24.21	2001	NH1	ARG	438	34.425	60.731	73.733	0.58
	ATOM 24.37	2004	NH2	ARG	438	35.402	61.282	75.713	0.58
10	ATOM 8.53	2007	C	ARG	438	30.587	55.365	77.100	0.58
	ATOM 7.09	2008	O	ARG	438	29.498	55.128	76.627	0.58
	ATOM 10.66	2009	N	ILE	439	30.752	56.178	78.145	1.00
15	ATOM 10.11	2011	CA	ILE	439	29.627	56.760	78.878	1.00
	ATOM 12.96	2012	CB	ILE	439	30.081	57.320	80.241	1.00
20	ATOM 10.12	2013	CG2	ILE	439	28.968	58.213	80.913	1.00
	ATOM 14.57	2014	CG1	ILE	439	30.427	56.146	81.159	1.00
	ATOM 21.31	2015	CD1	ILE	439	30.995	56.620	82.485	1.00
25	ATOM 8.83	2016	C	ILE	439	29.009	57.863	78.018	1.00
	ATOM 6.52	2017	O	ILE	439	29.737	58.628	77.301	1.00
30	ATOM 4.21	2018	N	PRO	440	27.664	57.830	77.895	0.43
	ATOM 3.42	2019	CD	PRO	440	26.757	56.807	78.445	0.43
	ATOM 2.93	2020	CA	PRO	440	26.944	58.828	77.097	0.43
35	ATOM 2.42	2021	CB	PRO	440	25.470	58.376	77.180	0.43
	ATOM 3.41	2022	CG	PRO	440	25.406	57.469	78.330	0.43
40	ATOM 4.35	2023	C	PRO	440	27.162	60.255	77.570	0.43
	ATOM 2.00	2024	O	PRO	440	27.467	60.519	78.721	0.43
	ATOM 8.70	2025	N	TYR	441	27.030	61.180	76.626	1.00
45	ATOM 11.22	2027	CA	TYR	441	27.242	62.604	76.875	1.00
	ATOM 7.10	2028	CB	TYR	441	26.141	63.160	77.783	1.00
50	ATOM 8.04	2029	CG	TYR	441	24.737	62.959	77.225	1.00
	ATOM 5.02	2030	CD1	TYR	441	24.199	63.851	76.299	1.00
	ATOM 6.62	2031	CE1	TYR	441	22.838	63.713	75.834	1.00
55	ATOM 8.69	2032	CD2	TYR	441	23.922	61.910	77.693	1.00
	ATOM 6.35	2033	CE2	TYR	441	22.585	61.771	77.265	1.00

	ATOM 3.59	2034	CZ	TYR	441	22.062	62.690	76.327	1.00
	ATOM 5.76	2035	OH	TYR	441	20.791	62.567	75.906	1.00
5	ATOM 13.13	2037	C	TYR	441	28.648	62.832	77.480	1.00
	ATOM 13.31	2038	O	TYR	441	28.782	63.363	78.580	1.00
10	ATOM 16.46	2039	N	PRO	442	29.708	62.474	76.720	1.00
	ATOM 16.07	2040	CD	PRO	442	29.650	62.023	75.305	1.00
	ATOM 18.90	2041	CA	PRO	442	31.099	62.634	77.171	1.00
15	ATOM 18.71	2042	CB	PRO	442	31.912	62.369	75.896	1.00
	ATOM 17.72	2043	CG	PRO	442	31.026	61.506	75.056	1.00
20	ATOM 17.44	2044	C	PRO	442	31.408	64.054	77.734	1.00
	ATOM 20.36	2045	O	PRO	442	30.973	65.047	77.201	1.00
	ATOM 19.95	2046	N	GLY	443	31.989	64.100	78.923	1.00
25	ATOM 18.74	2048	CA	GLY	443	32.369	65.379	79.530	1.00
	ATOM 18.63	2049	C	GLY	443	31.240	66.180	80.156	1.00
30	ATOM 17.80	2050	O	GLY	443	31.448	67.364	80.517	1.00
	ATOM 14.22	2051	N	MET	444	30.074	65.556	80.346	1.00
	ATOM 13.92	2053	CA	MET	444	28.943	66.262	80.933	1.00
35	ATOM 12.80	2054	CB	MET	444	27.822	66.473	79.889	1.00
	ATOM 12.70	2055	CG	MET	444	28.284	67.080	78.562	1.00
40	ATOM 16.71	2056	SD	MET	444	27.057	67.124	77.232	1.00
	ATOM 14.85	2057	CE	MET	444	25.673	67.839	78.021	1.00
	ATOM 12.83	2058	C	MET	444	28.368	65.584	82.168	1.00
45	ATOM 13.52	2059	O	MET	444	28.274	64.353	82.236	1.00
	ATOM 9.18	2060	N	THR	445	28.003	66.408	83.154	1.00
50	ATOM 9.96	2062	CA	THR	445	27.357	65.947	84.366	1.00
	ATOM 12.35	2063	CB	THR	445	27.543	66.962	85.483	1.00
	ATOM 10.49	2064	OG1	THR	445	26.889	68.200	85.111	1.00
55	ATOM 11.76	2066	CG2	THR	445	29.034	67.191	85.707	1.00
	ATOM 9.07	2067	C	THR	445	25.858	65.853	84.049	1.00

	ATOM 7.89	2068	O	THR	445	25.413	66.299	83.020	1.00
	ATOM 8.86	2069	N	ASN	446	25.096	65.245	84.931	1.00
5	ATOM 11.83	2071	CA	ASN	446	23.646	65.121	84.749	1.00
	ATOM 12.92	2072	CB	ASN	446	23.056	64.281	85.904	1.00
10	ATOM 13.53	2073	CG	ASN	446	23.418	62.783	85.799	1.00
	ATOM 14.11	2074	OD1	ASN	446	23.732	62.290	84.737	1.00
	ATOM 13.23	2075	ND2	ASN	446	23.300	62.072	86.888	1.00
15	ATOM 11.18	2078	C	ASN	446	22.927	66.489	84.591	1.00
	ATOM 12.97	2079	O	ASN	446	22.005	66.609	83.781	1.00
20	ATOM 12.38	2080	N	PRO	447	23.260	67.502	85.440	1.00
	ATOM 10.34	2081	CD	PRO	447	23.968	67.358	86.733	1.00
	ATOM 11.77	2082	CA	PRO	447	22.629	68.832	85.325	1.00
25	ATOM 14.03	2083	CB	PRO	447	23.305	69.620	86.456	1.00
	ATOM 12.63	2084	CG	PRO	447	23.500	68.549	87.537	1.00
30	ATOM 10.06	2085	C	PRO	447	22.883	69.452	83.932	1.00
	ATOM 10.62	2086	O	PRO	447	21.989	70.096	83.348	1.00
	ATOM 9.60	2087	N	GLU	448	24.095	69.261	83.379	1.00
35	ATOM 9.02	2089	CA	GLU	448	24.435	69.741	82.037	1.00
	ATOM 11.92	2090	CB	GLU	448	25.922	69.533	81.737	1.00
40	ATOM 14.25	2091	CG	GLU	448	26.842	70.583	82.471	1.00
	ATOM 17.10	2092	CD	GLU	448	28.303	70.263	82.243	1.00
	ATOM 15.79	2093	OE1	GLU	448	28.746	69.091	82.455	1.00
45	ATOM 20.35	2094	OE2	GLU	448	29.014	71.173	81.795	1.00
	ATOM 8.80	2095	C	GLU	448	23.633	69.041	80.944	1.00
50	ATOM 7.80	2096	O	GLU	448	23.277	69.617	79.909	1.00
	ATOM 8.54	2097	N	VAL	449	23.446	67.733	81.115	1.00
	ATOM 8.45	2099	CA	VAL	449	22.674	66.953	80.127	1.00
55	ATOM 7.43	2100	CB	VAL	449	22.727	65.414	80.492	1.00
	ATOM 9.15	2101	CG1	VAL	449	21.663	64.624	79.728	1.00

	ATOM 11.63	2102	CG2	VAL	449	24.090	64.862	80.141	1.00
	ATOM 5.64	2103	C	VAL	449	21.218	67.497	80.157	1.00
5	ATOM 7.70	2104	O	VAL	449	20.650	67.845	79.138	1.00
	ATOM 2.91	2105	N	ILE	450	20.649	67.631	81.337	0.60
10	ATOM 4.78	2107	CA	ILE	450	19.274	68.141	81.460	0.60
	ATOM 3.17	2108	CB	ILE	450	18.870	68.177	82.962	0.60
	ATOM 4.56	2109	CG2	ILE	450	17.538	68.969	83.185	0.60
15	ATOM 3.56	2110	CG1	ILE	450	18.733	66.721	83.454	0.60
	ATOM 4.70	2111	CD1	ILE	450	18.783	66.570	84.923	0.60
20	ATOM 5.71	2112	C	ILE	450	19.061	69.514	80.798	0.60
	ATOM 2.44	2113	O	ILE	450	18.146	69.734	79.987	0.60
	ATOM 9.36	2114	N	GLN	451	20.027	70.377	81.055	1.00
25	ATOM 14.03	2116	CA	GLN	451	20.053	71.754	80.559	1.00
	ATOM 19.90	2117	CB	GLN	451	21.248	72.487	81.211	1.00
30	ATOM 28.98	2118	CG	GLN	451	21.416	73.981	80.917	1.00
	ATOM 34.25	2119	CD	GLN	451	22.705	74.544	81.557	1.00
	ATOM 36.31	2120	OE1	GLN	451	23.830	74.071	81.261	1.00
35	ATOM 36.66	2121	NE2	GLN	451	22.553	75.546	82.431	1.00
	ATOM 12.84	2124	C	GLN	451	20.166	71.714	79.049	1.00
40	ATOM 11.56	2125	O	GLN	451	19.441	72.402	78.335	1.00
	ATOM 11.36	2126	N	ASN	452	21.069	70.891	78.527	1.00
	ATOM 10.00	2128	CA	ASN	452	21.196	70.819	77.083	1.00
45	ATOM 12.65	2129	CB	ASN	452	22.424	70.010	76.693	1.00
	ATOM 16.71	2130	CG	ASN	452	23.683	70.865	76.564	1.00
50	ATOM 23.16	2131	OD1	ASN	452	24.578	70.539	75.787	1.00
	ATOM 18.51	2132	ND2	ASN	452	23.759	71.937	77.308	1.00
	ATOM 9.75	2135	C	ASN	452	19.917	70.251	76.435	1.00
55	ATOM 8.53	2136	O	ASN	452	19.387	70.768	75.401	1.00
	ATOM 9.20	2137	N	LEU	453	19.386	69.174	77.007	1.00

	ATOM 8.71	2139	CA	LEU	453	18.160	68.612	76.436	1.00
	ATOM 9.28	2140	CB	LEU	453	17.687	67.411	77.236	1.00
5	ATOM 9.86	2141	CG	LEU	453	18.624	66.186	77.152	1.00
	ATOM 7.88	2142	CD1	LEU	453	18.104	65.089	78.051	1.00
10	ATOM 11.07	2143	CD2	LEU	453	18.697	65.762	75.664	1.00
	ATOM 8.57	2144	C	LEU	453	17.046	69.650	76.404	1.00
	ATOM 10.42	2145	O	LEU	453	16.381	69.785	75.435	1.00
15	ATOM 11.11	2146	N	GLU	454	16.875	70.396	77.490	1.00
	ATOM 11.88	2148	CA	GLU	454	15.798	71.398	77.560	1.00
20	ATOM 15.37	2149	CB	GLU	454	15.629	71.866	79.011	1.00
	ATOM 18.92	2150	CG	GLU	454	15.194	70.672	79.903	1.00
	ATOM 23.60	2151	CD	GLU	454	14.980	70.997	81.371	1.00
25	ATOM 26.49	2152	OE1	GLU	454	15.583	71.964	81.885	1.00
	ATOM 25.97	2153	OE2	GLU	454	14.211	70.241	82.038	1.00
30	ATOM 11.10	2154	C	GLU	454	15.913	72.548	76.534	1.00
	ATOM 12.14	2155	O	GLU	454	14.905	73.160	76.138	1.00
	ATOM 9.92	2156	N	ARG	455	17.115	72.728	75.985	1.00
35	ATOM 9.09	2158	CA	ARG	455	17.394	73.739	74.943	1.00
	ATOM 11.52	2159	CB	ARG	455	18.904	74.071	74.933	1.00
40	ATOM 13.92	2160	CG	ARG	455	19.385	74.722	76.196	1.00
	ATOM 15.24	2161	CD	ARG	455	20.793	75.252	76.049	1.00
	ATOM 12.95	2162	NE	ARG	455	20.845	76.406	75.150	1.00
45	ATOM 12.76	2164	CZ	ARG	455	21.958	77.079	74.862	1.00
	ATOM 11.45	2165	NH1	ARG	455	23.121	76.705	75.392	1.00
50	ATOM 11.06	2168	NH2	ARG	455	21.906	78.149	74.069	1.00
	ATOM 9.53	2171	C	ARG	455	17.070	73.160	73.571	1.00
	ATOM 11.25	2172	O	ARG	455	17.085	73.844	72.551	1.00
55	ATOM 8.70	2173	N	GLY	456	16.808	71.853	73.529	1.00
	ATOM 6.55	2175	CA	GLY	456	16.561	71.205	72.263	1.00



	ATOM 5.96	2176	C	GLY	456	17.796	70.526	71.681	1.00
	ATOM 8.41	2177	O	GLY	456	17.750	70.047	70.562	1.00
5	ATOM 7.30	2178	N	TYR	457	18.922	70.530	72.390	1.00
	ATOM 7.68	2180	CA	TYR	457	20.131	69.880	71.858	1.00
10	ATOM 7.52	2181	CB	TYR	457	21.401	70.324	72.579	1.00
	ATOM 9.01	2182	CG	TYR	457	21.840	71.776	72.424	1.00
	ATOM 10.16	2183	CD1	TYR	457	21.454	72.534	71.331	1.00
15	ATOM 10.10	2184	CE1	TYR	457	21.989	73.844	71.097	1.00
	ATOM 11.27	2185	CD2	TYR	457	22.751	72.319	73.310	1.00
20	ATOM 12.24	2186	CE2	TYR	457	23.290	73.622	73.108	1.00
	ATOM 11.69	2187	CZ	TYR	457	22.897	74.360	71.996	1.00
	ATOM 10.39	2188	OH	TYR	457	23.426	75.627	71.811	1.00
25	ATOM 7.71	2190	C	TYR	457	20.004	68.416	72.217	1.00
	ATOM 5.65	2191	O	TYR	457	19.218	68.070	73.085	1.00
30	ATOM 6.53	2192	N	ARG	458	20.804	67.586	71.565	1.00
	ATOM 7.08	2194	CA	ARG	458	20.848	66.148	71.900	1.00
	ATOM 4.26	2195	CB	ARG	458	20.196	65.324	70.798	1.00
35	ATOM 7.42	2196	CG	ARG	458	18.641	65.551	70.676	1.00
	ATOM 5.42	2197	CD	ARG	458	17.955	65.113	71.973	1.00
40	ATOM 4.88	2198	NE	ARG	458	16.498	65.301	71.900	1.00
	ATOM 9.16	2200	CZ	ARG	458	15.829	66.318	72.442	1.00
	ATOM 9.98	2201	NH1	ARG	458	16.486	67.283	73.103	1.00
45	ATOM 5.17	2204	NH2	ARG	458	14.483	66.325	72.396	1.00
	ATOM 9.32	2207	C	ARG	458	22.343	65.863	71.951	1.00
50	ATOM 7.42	2208	O	ARG	458	23.171	66.756	71.695	1.00
	ATOM 8.38	2209	N	MET	459	22.705	64.617	72.272	1.00
	ATOM 8.96	2211	CA	MET	459	24.122	64.237	72.331	1.00
55	ATOM 6.66	2212	CB	MET	459	24.260	62.724	72.596	1.00
	ATOM 8.80	2213	CG	MET	459	25.577	62.369	73.205	1.00

	ATOM 9.21	2214	SD	MET	459	25.707	60.524	73.364	1.00
	ATOM 9.63	2215	CE	MET	459	24.390	60.196	74.315	1.00
5	ATOM 7.14	2216	C	MET	459	24.880	64.547	71.059	1.00
	ATOM 7.18	2217	O	MET	459	24.436	64.284	69.955	1.00
10	ATOM 8.38	2218	N	VAL	460	26.067	65.113	71.243	1.00
	ATOM 10.29	2220	CA	VAL	460	26.977	65.433	70.167	1.00
	ATOM 13.33	2221	CB	VAL	460	28.318	65.999	70.764	1.00
15	ATOM 12.10	2222	CG1	VAL	460	29.387	66.083	69.725	1.00
	ATOM 16.34	2223	CG2	VAL	460	28.070	67.394	71.423	1.00
20	ATOM 11.62	2224	C	VAL	460	27.275	64.124	69.428	1.00
	ATOM 13.62	2225	O	VAL	460	27.376	63.081	70.059	1.00
	ATOM 11.56	2226	N	ARG	461	27.414	64.195	68.108	1.00
25	ATOM 14.53	2228	CA	ARG	461	27.748	63.033	67.276	1.00
	ATOM 14.99	2229	CB	ARG	461	28.101	63.456	65.828	1.00
30	ATOM 14.92	2230	CG	ARG	461	26.963	64.094	65.000	1.00
	ATOM 17.39	2231	CD	ARG	461	27.431	64.655	63.638	1.00
	ATOM 13.44	2232	NE	ARG	461	26.286	64.991	62.776	1.00
35	ATOM 17.27	2234	CZ	ARG	461	25.599	66.141	62.785	1.00
	ATOM 15.13	2235	NH1	ARG	461	25.901	67.139	63.624	1.00
40	ATOM 12.90	2238	NH2	ARG	461	24.618	66.322	61.901	1.00
	ATOM 16.47	2241	C	ARG	461	28.994	62.358	67.822	1.00
	ATOM 15.87	2242	O	ARG	461	30.049	63.002	67.966	1.00
45	ATOM 14.68	2243	N	PRO	462	28.887	61.062	68.179	1.00
	ATOM 15.13	2244	CD	PRO	462	27.675	60.227	68.325	1.00
50	ATOM 16.27	2245	CA	PRO	462	30.075	60.385	68.697	1.00
	ATOM 14.87	2246	CB	PRO	462	29.536	58.998	69.123	1.00
	ATOM 15.13	2247	CG	PRO	462	28.058	59.285	69.459	1.00
55	ATOM 17.36	2248	C	PRO	462	31.118	60.275	67.600	1.00
	ATOM 14.94	2249	O	PRO	462	30.816	60.340	66.414	1.00

	ATOM 21.83	2250	N	ASP	463	32.380	60.214	68.025	1.00
	ATOM 23.79	2252	CA	ASP	463	33.503	60.072	67.108	1.00
5	ATOM 27.14	2253	CB	ASP	463	34.808	59.889	67.883	1.00
	ATOM 31.66	2254	CG	ASP	463	35.214	61.133	68.627	1.00
10	ATOM 32.60	2255	OD1	ASP	463	34.823	62.242	68.175	1.00
	ATOM 34.15	2256	OD2	ASP	463	35.918	60.996	69.662	1.00
	ATOM 24.03	2257	C	ASP	463	33.265	58.833	66.293	1.00
15	ATOM 25.01	2258	O	ASP	463	32.772	57.838	66.820	1.00
	ATOM 23.24	2259	N	ASN	464	33.574	58.926	65.003	1.00
20	ATOM 24.48	2261	CA	ASN	464	33.421	57.834	64.064	1.00
	ATOM 29.50	2262	CB	ASN	464	34.449	56.752	64.387	1.00
	ATOM 30.61	2263	CG	ASN	464	35.856	57.299	64.371	1.00
25	ATOM 33.47	2264	OD1	ASN	464	36.233	58.041	63.460	1.00
	ATOM 32.95	2265	ND2	ASN	464	36.594	57.036	65.416	1.00
30	ATOM 22.41	2268	C	ASN	464	32.023	57.235	63.914	1.00
	ATOM 24.37	2269	O	ASN	464	31.879	56.143	63.420	1.00
	ATOM 19.98	2270	N	CYS	465	30.991	57.933	64.375	1.00
35	ATOM 19.12	2272	CA	CYS	465	29.613	57.417	64.210	1.00
	ATOM 18.06	2273	CB	CYS	465	28.680	58.077	65.244	1.00
40	ATOM 16.47	2274	SG	CYS	465	26.961	57.543	65.229	1.00
	ATOM 17.54	2275	C	CYS	465	29.095	57.739	62.792	1.00
	ATOM 17.92	2276	O	CYS	465	29.175	58.877	62.353	1.00
45	ATOM 15.82	2277	N	PRO	466	28.613	56.723	62.037	1.00
	ATOM 15.22	2278	CD	PRO	466	28.607	55.275	62.326	1.00
50	ATOM 14.66	2279	CA	PRO	466	28.090	56.994	60.694	1.00
	ATOM 15.65	2280	CB	PRO	466	27.629	55.624	60.214	1.00
	ATOM 16.18	2281	CG	PRO	466	28.554	54.659	60.957	1.00
55	ATOM 14.65	2282	C	PRO	466	26.864	57.933	60.846	1.00
	ATOM 10.18	2283	O	PRO	466	26.012	57.759	61.757	1.00

	ATOM	2284	N	GLU	467	26.797	58.937	59.971	1.00
	11.67								
	ATOM	2286	CA	GLU	467	25.696	59.912	60.010	1.00
	10.18								
5	ATOM	2287	CB	GLU	467	25.910	60.972	58.915	1.00
	9.33								
	ATOM	2288	CG	GLU	467	24.920	62.171	59.002	1.00
	9.53								
10	ATOM	2289	CD	GLU	467	24.934	62.883	60.360	1.00
	9.62								
	ATOM	2290	OE1	GLU	467	25.913	62.769	61.119	1.00
	8.00								
	ATOM	2291	OE2	GLU	467	23.941	63.560	60.690	1.00
	11.06								
15	ATOM	2292	C	GLU	467	24.284	59.256	59.915	1.00
	7.67								
	ATOM	2293	O	GLU	467	23.358	59.649	60.633	1.00
	7.21								
20	ATOM	2294	N	GLU	468	24.136	58.199	59.122	0.51
	3.25								
	ATOM	2296	CA	GLU	468	22.835	57.497	59.036	0.51
	3.63								
	ATOM	2297	CB	GLU	468	22.901	56.340	58.038	0.51
	2.00								
25	ATOM	2298	CG	GLU	468	23.184	56.814	56.640	0.51
	3.78								
	ATOM	2299	CD	GLU	468	23.598	55.704	55.734	0.51
	5.17								
30	ATOM	2300	OE1	GLU	468	22.700	55.024	55.182	0.51
	3.58								
	ATOM	2301	OE2	GLU	468	24.826	55.518	55.577	0.51
	5.21								
	ATOM	2302	C	GLU	468	22.378	56.955	60.386	0.51
	2.00								
35	ATOM	2303	O	GLU	468	21.223	57.045	60.754	0.51
	2.00								
	ATOM	2304	N	LEU	469	23.326	56.408	61.142	1.00
	4.11								
40	ATOM	2306	CA	LEU	469	23.040	55.864	62.475	1.00
	5.94								
	ATOM	2307	CB	LEU	469	24.210	55.035	63.024	1.00
	8.41								
	ATOM	2308	CG	LEU	469	23.924	54.377	64.411	1.00
	9.32								
45	ATOM	2309	CD1	LEU	469	22.854	53.295	64.270	1.00
	9.52								
	ATOM	2310	CD2	LEU	469	25.225	53.755	64.965	1.00
	9.76								
50	ATOM	2311	C	LEU	469	22.741	56.996	63.456	1.00
	7.74								
	ATOM	2312	O	LEU	469	21.808	56.935	64.250	1.00
	8.18								
	ATOM	2313	N	TYR	470	23.528	58.079	63.376	1.00
	7.64								
55	ATOM	2315	CA	TYR	470	23.299	59.211	64.257	1.00
	6.10								
	ATOM	2316	CB	TYR	470	24.370	60.325	64.013	1.00
	7.72								

	ATOM 6.53	2317	CG	TYR	470	24.174	61.538	64.921	1.00
	ATOM 8.09	2318	CD1	TYR	470	24.304	61.421	66.298	1.00
5	ATOM 8.81	2319	CE1	TYR	470	24.154	62.522	67.136	1.00
	ATOM 7.03	2320	CD2	TYR	470	23.876	62.807	64.388	1.00
10	ATOM 6.75	2321	CE2	TYR	470	23.712	63.923	65.213	1.00
	ATOM 9.17	2322	CZ	TYR	470	23.857	63.782	66.587	1.00
	ATOM 8.33	2323	OH	TYR	470	23.757	64.879	67.455	1.00
15	ATOM 5.88	2325	C	TYR	470	21.879	59.764	63.976	1.00
	ATOM 8.89	2326	O	TYR	470	21.188	60.109	64.910	1.00
20	ATOM 6.37	2327	N	GLN	471	21.464	59.905	62.704	1.00
	ATOM 5.98	2329	CA	GLN	471	20.089	60.396	62.401	1.00
	ATOM 7.06	2330	CB	GLN	471	19.902	60.709	60.903	1.00
25	ATOM 8.39	2331	CG	GLN	471	20.667	62.016	60.488	1.00
	ATOM 10.48	2332	CD	GLN	471	20.303	63.192	61.403	1.00
30	ATOM 9.64	2333	OE1	GLN	471	19.102	63.454	61.641	1.00
	ATOM 8.49	2334	NE2	GLN	471	21.313	63.932	61.888	1.00
	ATOM 6.80	2337	C	GLN	471	19.023	59.381	62.912	1.00
35	ATOM 8.94	2338	O	GLN	471	17.924	59.746	63.251	1.00
	ATOM 7.17	2339	N	LEU	472	19.372	58.097	63.006	1.00
40	ATOM 6.73	2341	CA	LEU	472	18.409	57.129	63.579	1.00
	ATOM 7.36	2342	CB	LEU	472	18.837	55.684	63.305	1.00
	ATOM 4.99	2343	CG	LEU	472	17.751	54.633	63.568	1.00
45	ATOM 6.17	2344	CD1	LEU	472	16.608	54.835	62.580	1.00
	ATOM 5.99	2345	CD2	LEU	472	18.386	53.219	63.432	1.00
50	ATOM 7.03	2346	C	LEU	472	18.296	57.380	65.105	1.00
	ATOM 7.74	2347	O	LEU	472	17.217	57.333	65.696	1.00
	ATOM 8.81	2348	N	MET	473	19.418	57.672	65.765	1.00
55	ATOM 7.49	2350	CA	MET	473	19.375	57.957	67.205	1.00
	ATOM 6.97	2351	CB	MET	473	20.772	58.193	67.738	1.00

	ATOM 8.95	2352	CG	MET	473	21.833	57.105	67.411	1.00
	ATOM 9.18	2353	SD	MET	473	23.482	57.869	67.764	1.00
5	ATOM 6.33	2354	CE	MET	473	24.667	56.454	67.716	1.00
	ATOM 7.22	2355	C	MET	473	18.533	59.225	67.463	1.00
10	ATOM 6.41	2356	O	MET	473	17.774	59.310	68.434	1.00
	ATOM 5.53	2357	N	ARG	474	18.678	60.214	66.589	1.00
	ATOM 8.24	2359	CA	ARG	474	17.923	61.481	66.739	1.00
15	ATOM 9.46	2360	CB	ARG	474	18.260	62.503	65.609	1.00
	ATOM 12.37	2361	CG	ARG	474	19.713	62.862	65.471	1.00
20	ATOM 19.09	2362	CD	ARG	474	20.229	63.720	66.655	1.00
	ATOM 20.33	2363	NE	ARG	474	19.508	64.990	66.825	1.00
	ATOM 16.96	2365	CZ	ARG	474	20.060	66.126	67.244	1.00
25	ATOM 12.13	2366	NH1	ARG	474	21.372	66.206	67.494	1.00
	ATOM 16.09	2369	NH2	ARG	474	19.260	67.108	67.667	1.00
30	ATOM 8.17	2372	C	ARG	474	16.415	61.194	66.676	1.00
	ATOM 9.22	2373	O	ARG	474	15.665	61.824	67.401	1.00
	ATOM 6.83	2374	N	LEU	475	15.985	60.220	65.863	1.00
35	ATOM 8.75	2376	CA	LEU	475	14.522	59.853	65.826	1.00
	ATOM 8.07	2377	CB	LEU	475	14.148	58.791	64.774	1.00
40	ATOM 12.69	2378	CG	LEU	475	14.378	59.002	63.303	1.00
	ATOM 14.03	2379	CD1	LEU	475	13.634	57.895	62.566	1.00
	ATOM 13.04	2380	CD2	LEU	475	13.856	60.359	62.846	1.00
45	ATOM 8.19	2381	C	LEU	475	14.111	59.298	67.164	1.00
	ATOM 8.29	2382	O	LEU	475	12.992	59.568	67.637	1.00
50	ATOM 8.96	2383	N	CYS	476	15.009	58.535	67.805	1.00
	ATOM 9.13	2385	CA	CYS	476	14.702	58.001	69.132	1.00
	ATOM 9.64	2386	CB	CYS	476	15.797	57.005	69.593	1.00
55	ATOM 10.31	2387	SG	CYS	476	15.970	55.547	68.497	1.00
	ATOM 9.15	2388	C	CYS	476	14.593	59.093	70.173	1.00

5	ATOM 8.58	2389	O	CYS	476	14.021	58.889	71.243	1.00
	ATOM 11.52	2390	N	TRP	477	15.245	60.241	69.909	1.00
	ATOM 11.66	2392	CA	TRP	477	15.237	61.331	70.874	1.00
	ATOM 10.91	2393	CB	TRP	477	16.652	61.910	71.060	1.00
10	ATOM 10.69	2394	CG	TRP	477	17.729	60.905	71.477	1.00
	ATOM 8.06	2395	CD2	TRP	477	19.090	60.880	71.014	1.00
	ATOM 10.51	2396	CE2	TRP	477	19.706	59.737	71.582	1.00
	ATOM 6.59	2397	CE3	TRP	477	19.849	61.715	70.169	1.00
15	ATOM 7.36	2398	CD1	TRP	477	17.583	59.810	72.312	1.00
	ATOM 9.93	2399	NE1	TRP	477	18.759	59.116	72.367	1.00
	ATOM 8.71	2401	CZ2	TRP	477	21.065	59.391	71.329	1.00
	ATOM 7.45	2402	CZ3	TRP	477	21.191	61.381	69.914	1.00
20	ATOM 8.83	2403	CH2	TRP	477	21.783	60.232	70.493	1.00
	ATOM 12.97	2404	C	TRP	477	14.251	62.466	70.550	1.00
	ATOM 12.53	2405	O	TRP	477	14.387	63.589	71.018	1.00
	ATOM 15.35	2406	N	LYS	478	13.210	62.153	69.796	1.00
25	ATOM 14.26	2408	CA	LYS	478	12.215	63.162	69.475	1.00
	ATOM 16.83	2409	CB	LYS	478	11.233	62.647	68.415	1.00
	ATOM 19.68	2410	CG	LYS	478	11.865	62.697	67.038	1.00
	ATOM 24.32	2411	CD	LYS	478	10.898	62.366	65.969	1.00
30	ATOM 24.58	2412	CE	LYS	478	11.468	62.669	64.598	1.00
	ATOM 29.10	2413	NZ	LYS	478	11.720	64.104	64.481	1.00
	ATOM 12.48	2417	C	LYS	478	11.555	63.619	70.739	1.00
	ATOM 11.24	2418	O	LYS	478	11.399	62.871	71.705	1.00
35	ATOM 12.24	2419	N	GLU	479	11.335	64.926	70.818	1.00
	ATOM 13.61	2421	CA	GLU	479	10.719	65.500	72.014	1.00
	ATOM 16.26	2422	CB	GLU	479	10.430	66.996	71.763	1.00
	ATOM 20.83	2423	CG	GLU	479	9.854	67.725	72.953	1.00
40	ATOM 26.33	2424	CD	GLU	479	10.848	67.847	74.081	1.00

	ATOM	2425	OE1	GLU	479	12.068	67.605	73.841	1.00
	27.22								
	ATOM	2426	OE2	GLU	479	10.415	68.188	75.210	1.00
	27.42								
5	ATOM	2427	C	GLU	479	9.419	64.788	72.399	1.00
	13.09								
	ATOM	2428	O	GLU	479	9.211	64.409	73.548	1.00
	13.68								
10	ATOM	2429	N	ARG	480	8.485	64.679	71.461	1.00
	12.69								
	ATOM	2431	CA	ARG	480	7.219	64.006	71.831	1.00
	15.85								
	ATOM	2432	CB	ARG	480	6.046	64.466	70.948	1.00
	16.94								
15	ATOM	2433	CG	ARG	480	5.859	65.995	70.946	1.00
	23.39								
	ATOM	2434	CD	ARG	480	4.530	66.365	70.332	1.00
	27.67								
	ATOM	2435	NE	ARG	480	4.493	66.092	68.904	1.00
	33.64								
20	ATOM	2437	CZ	ARG	480	3.398	65.729	68.234	1.00
	36.96								
	ATOM	2438	NH1	ARG	480	2.243	65.585	68.881	1.00
	38.79								
25	ATOM	2441	NH2	ARG	480	3.443	65.565	66.910	1.00
	35.83								
	ATOM	2444	C	ARG	480	7.376	62.500	71.731	1.00
	12.27								
	ATOM	2445	O	ARG	480	7.801	61.997	70.723	1.00
	12.79								
30	ATOM	2446	N	PRO	481	7.021	61.777	72.788	1.00
	11.66								
	ATOM	2447	CD	PRO	481	6.505	62.310	74.063	1.00
	12.06								
35	ATOM	2448	CA	PRO	481	7.124	60.311	72.817	1.00
	12.25								
	ATOM	2449	CB	PRO	481	6.349	59.943	74.090	1.00
	12.06								
40	ATOM	2450	CG	PRO	481	6.596	61.112	74.988	1.00
	12.05								
	ATOM	2451	C	PRO	481	6.467	59.690	71.595	1.00
	12.62								
	ATOM	2452	O	PRO	481	7.070	58.886	70.870	1.00
	10.95								
45	ATOM	2453	N	GLU	482	5.267	60.179	71.262	1.00
	13.13								
	ATOM	2455	CA	GLU	482	4.518	59.631	70.138	1.00
	15.42								
	ATOM	2456	CB	GLU	482	3.068	60.178	70.141	1.00
	21.05								
50	ATOM	2457	CG	GLU	482	2.960	61.678	69.884	1.00
	27.58								
	ATOM	2458	CD	GLU	482	2.981	62.568	71.132	1.00
	30.23								
55	ATOM	2459	OE1	GLU	482	3.405	62.151	72.254	1.00
	28.76								
	ATOM	2460	OE2	GLU	482	2.544	63.730	70.955	1.00
	32.94								



	ATOM 12.59	2461	C	GLU	482	5.175	59.766	68.767	1.00
	ATOM 10.03	2462	O	GLU	482	4.865	59.019	67.819	1.00
5	ATOM 13.06	2463	N	ASP	483	6.149	60.676	68.653	1.00
	ATOM 11.42	2465	CA	ASP	483	6.854	60.865	67.389	1.00
10	ATOM 14.02	2466	CB	ASP	483	7.410	62.289	67.257	1.00
	ATOM 19.29	2467	CG	ASP	483	6.303	63.353	67.128	1.00
	ATOM 18.01	2468	OD1	ASP	483	5.155	63.000	66.796	1.00
15	ATOM 18.98	2469	OD2	ASP	483	6.604	64.526	67.389	1.00
	ATOM 9.88	2470	C	ASP	483	8.019	59.913	67.212	1.00
20	ATOM 10.53	2471	O	ASP	483	8.552	59.772	66.108	1.00
	ATOM 8.99	2472	N	ARG	484	8.465	59.324	68.311	1.00
	ATOM 8.84	2474	CA	ARG	484	9.599	58.377	68.286	1.00
25	ATOM 9.56	2475	CB	ARG	484	10.047	58.081	69.714	1.00
	ATOM 6.73	2476	CG	ARG	484	10.416	59.331	70.509	1.00
30	ATOM 8.41	2477	CD	ARG	484	10.875	59.035	71.914	1.00
	ATOM 7.26	2478	NE	ARG	484	10.877	60.273	72.686	1.00
	ATOM 10.06	2480	CZ	ARG	484	10.694	60.357	74.003	1.00
35	ATOM 9.41	2481	NH1	ARG	484	10.524	59.253	74.736	1.00
	ATOM 7.76	2484	NH2	ARG	484	10.557	61.561	74.583	1.00
40	ATOM 9.79	2487	C	ARG	484	9.079	57.105	67.577	1.00
	ATOM 8.30	2488	O	ARG	484	7.927	56.744	67.719	1.00
	ATOM 8.28	2489	N	PRO	485	9.940	56.427	66.811	1.00
45	ATOM 7.46	2490	CD	PRO	485	11.404	56.680	66.780	1.00
	ATOM 8.60	2491	CA	PRO	485	9.582	55.219	66.057	1.00
50	ATOM 7.26	2492	CB	PRO	485	10.809	55.012	65.157	1.00
	ATOM 7.83	2493	CG	PRO	485	11.953	55.476	66.042	1.00
	ATOM 8.39	2494	C	PRO	485	9.312	54.001	66.905	1.00
55	ATOM 8.61	2495	O	PRO	485	9.562	53.983	68.104	1.00
	ATOM 10.14	2496	N	THR	486	8.751	52.978	66.267	1.00

	ATOM 9.93	2498	CA	THR	486	8.525	51.716	66.975	1.00
	ATOM 11.71	2499	CB	THR	486	7.432	50.894	66.285	1.00
5	ATOM 9.31	2500	OG1	THR	486	7.883	50.576	64.963	1.00
	ATOM 10.77	2502	CG2	THR	486	6.094	51.712	66.212	1.00
10	ATOM 9.76	2503	C	THR	486	9.821	50.891	66.906	1.00
	ATOM 9.57	2504	O	THR	486	10.720	51.106	66.036	1.00
	ATOM 8.81	2505	N	PHE	487	9.894	49.880	67.764	1.00
15	ATOM 9.30	2507	CA	PHE	487	11.043	49.002	67.758	1.00
	ATOM 7.15	2508	CB	PHE	487	11.124	48.168	69.050	1.00
20	ATOM 6.74	2509	CG	PHE	487	11.748	48.908	70.162	1.00
	ATOM 5.25	2510	CD1	PHE	487	13.118	49.181	70.141	1.00
	ATOM 6.74	2511	CD2	PHE	487	10.988	49.333	71.240	1.00
25	ATOM 5.38	2512	CE1	PHE	487	13.716	49.878	71.224	1.00
	ATOM 7.47	2513	CE2	PHE	487	11.561	50.015	72.281	1.00
30	ATOM 7.99	2514	CZ	PHE	487	12.953	50.287	72.278	1.00
	ATOM 9.64	2515	C	PHE	487	11.083	48.182	66.505	1.00
	ATOM 8.29	2516	O	PHE	487	12.155	47.935	65.950	1.00
35	ATOM 11.10	2517	N	ASP	488	9.911	47.850	65.966	1.00
	ATOM 10.80	2519	CA	ASP	488	9.909	47.132	64.699	1.00
40	ATOM 17.60	2520	CB	ASP	488	8.510	46.673	64.306	1.00
	ATOM 22.53	2521	CG	ASP	488	8.565	45.552	63.286	1.00
	ATOM 26.33	2522	OD1	ASP	488	9.381	44.630	63.479	1.00
45	ATOM 25.89	2523	OD2	ASP	488	7.857	45.617	62.281	1.00
	ATOM 10.95	2524	C	ASP	488	10.504	48.007	63.566	1.00
50	ATOM 9.83	2525	O	ASP	488	11.268	47.505	62.680	1.00
	ATOM 7.53	2526	N	TYR	489	10.155	49.307	63.554	1.00
	ATOM 8.33	2528	CA	TYR	489	10.703	50.218	62.527	1.00
55	ATOM 6.41	2529	CB	TYR	489	10.162	51.673	62.706	1.00
	ATOM 12.54	2530	CG	TYR	489	10.787	52.671	61.761	1.00

	ATOM 11.81	2531	CD1	TYR	489	10.319	52.830	60.467	1.00
	ATOM 12.33	2532	CE1	TYR	489	10.952	53.702	59.580	1.00
5	ATOM 13.93	2533	CD2	TYR	489	11.918	53.433	62.155	1.00
	ATOM 12.86	2534	CE2	TYR	489	12.537	54.307	61.272	1.00
10	ATOM 12.57	2535	CZ	TYR	489	12.061	54.431	60.003	1.00
	ATOM 10.28	2536	OH	TYR	489	12.683	55.295	59.134	1.00
	ATOM 6.43	2538	C	TYR	489	12.250	50.223	62.661	1.00
15	ATOM 9.95	2539	O	TYR	489	12.966	50.046	61.708	1.00
	ATOM 9.44	2540	N	LEU	490	12.715	50.448	63.868	1.00
20	ATOM 10.56	2542	CA	LEU	490	14.144	50.483	64.208	1.00
	ATOM 9.09	2543	CB	LEU	490	14.319	50.711	65.723	1.00
	ATOM 9.40	2544	CG	LEU	490	13.938	52.108	66.222	1.00
25	ATOM 10.17	2545	CD1	LEU	490	13.737	52.138	67.750	1.00
	ATOM 11.51	2546	CD2	LEU	490	15.035	53.094	65.804	1.00
30	ATOM 9.22	2547	C	LEU	490	14.855	49.192	63.768	1.00
	ATOM 9.40	2548	O	LEU	490	15.841	49.242	63.113	1.00
	ATOM 9.85	2549	N	ARG	491	14.278	48.035	64.074	1.00
35	ATOM 8.29	2551	CA	ARG	491	14.891	46.758	63.686	1.00
	ATOM 8.09	2552	CB	ARG	491	14.014	45.575	64.163	1.00
40	ATOM 9.21	2553	CG	ARG	491	14.557	44.214	63.601	1.00
	ATOM 14.63	2554	CD	ARG	491	13.455	43.119	63.545	1.00
	ATOM 17.86	2555	NE	ARG	491	12.249	43.619	62.861	1.00
45	ATOM 17.59	2557	CZ	ARG	491	12.054	43.689	61.541	1.00
	ATOM 18.87	2558	NH1	ARG	491	12.975	43.279	60.674	1.00
50	ATOM 16.93	2561	NH2	ARG	491	10.917	44.213	61.089	1.00
	ATOM 9.76	2564	C	ARG	491	15.078	46.682	62.175	1.00
	ATOM 10.85	2565	O	ARG	491	16.145	46.355	61.644	1.00
55	ATOM 8.11	2566	N	SER	492	14.026	47.078	61.468	0.71
	ATOM 6.86	2568	CA	SER	492	14.006	47.054	60.027	0.71

	ATOM 7.55	2569	CB	SER	492	12.597	47.458	59.546	0.71
	ATOM 11.29	2570	OG	SER	492	12.518	47.367	58.156	0.71
5	ATOM 7.68	2572	C	SER	492	15.050	47.977	59.406	0.71
	ATOM 3.32	2573	O	SER	492	15.724	47.620	58.456	0.71
10	ATOM 8.81	2574	N	VAL	493	15.155	49.204	59.912	1.00
	ATOM 10.14	2576	CA	VAL	493	16.151	50.128	59.343	1.00
	ATOM 9.81	2577	CB	VAL	493	16.023	51.549	59.943	1.00
15	ATOM 7.77	2578	CG1	VAL	493	17.238	52.441	59.508	1.00
	ATOM 8.92	2579	CG2	VAL	493	14.693	52.175	59.516	1.00
20	ATOM 8.53	2580	C	VAL	493	17.554	49.594	59.670	1.00
	ATOM 10.58	2581	O	VAL	493	18.448	49.650	58.842	1.00
	ATOM 9.18	2582	N	LEU	494	17.747	49.139	60.906	1.00
25	ATOM 9.12	2584	CA	LEU	494	19.058	48.622	61.318	1.00
	ATOM 9.94	2585	CB	LEU	494	19.096	48.364	62.816	1.00
30	ATOM 8.16	2586	CG	LEU	494	19.261	49.601	63.715	1.00
	ATOM 4.70	2587	CD1	LEU	494	18.790	49.288	65.090	1.00
	ATOM 2.75	2588	CD2	LEU	494	20.702	50.179	63.717	1.00
35	ATOM 11.22	2589	C	LEU	494	19.490	47.425	60.497	1.00
	ATOM 11.13	2590	O	LEU	494	20.683	47.290	60.169	1.00
40	ATOM 11.26	2591	N	GLU	495	18.539	46.541	60.144	1.00
	ATOM 11.66	2593	CA	GLU	495	18.878	45.407	59.279	1.00
	ATOM 13.61	2594	CB	GLU	495	17.679	44.444	59.133	1.00
45	ATOM 11.89	2595	CG	GLU	495	17.503	43.566	60.380	1.00
	ATOM 17.24	2596	CD	GLU	495	16.260	42.687	60.369	1.00
50	ATOM 18.35	2597	OE1	GLU	495	15.562	42.579	59.346	1.00
	ATOM 18.05	2598	OE2	GLU	495	15.955	42.113	61.429	1.00
	ATOM 11.87	2599	C	GLU	495	19.321	45.903	57.874	1.00
55	ATOM 11.52	2600	O	GLU	495	20.172	45.319	57.237	1.00
	ATOM 9.31	2601	N	ASP	496	18.661	46.934	57.362	1.00

	ATOM 10.10	2603	CA	ASP	496	19.032	47.490	56.081	1.00
	ATOM 12.32	2604	CB	ASP	496	18.012	48.585	55.663	1.00
5	ATOM 16.14	2605	CG	ASP	496	16.755	47.995	55.058	1.00
	ATOM 15.24	2606	OD1	ASP	496	16.753	46.774	54.763	1.00
10	ATOM 14.19	2607	OD2	ASP	496	15.767	48.716	54.884	1.00
	ATOM 10.00	2608	C	ASP	496	20.429	48.085	56.167	1.00
	ATOM 10.81	2609	O	ASP	496	21.251	47.896	55.286	1.00
15	ATOM 10.93	2610	N	PHE	497	20.722	48.775	57.268	1.00
	ATOM 12.83	2612	CA	PHE	497	22.039	49.389	57.412	1.00
20	ATOM 12.07	2613	CB	PHE	497	22.131	50.120	58.753	1.00
	ATOM 9.10	2614	CG	PHE	497	21.398	51.445	58.801	1.00
	ATOM 11.06	2615	CD1	PHE	497	20.706	51.925	57.697	1.00
25	ATOM 9.30	2616	CD2	PHE	497	21.452	52.221	59.957	1.00
	ATOM 11.14	2617	CE1	PHE	497	20.068	53.232	57.737	1.00
30	ATOM 10.69	2618	CE2	PHE	497	20.836	53.481	60.012	1.00
	ATOM 9.81	2619	CZ	PHE	497	20.148	53.981	58.893	1.00
	ATOM 16.73	2620	C	PHE	497	23.124	48.288	57.352	1.00
35	ATOM 14.67	2621	O	PHE	497	24.127	48.408	56.636	1.00
	ATOM 19.32	2622	N	PHE	498	22.847	47.184	58.053	1.00
40	ATOM 24.72	2624	CA	PHE	498	23.738	46.021	58.150	1.00
	ATOM 28.15	2625	CB	PHE	498	23.138	45.044	59.210	1.00
	ATOM 29.02	2626	CG	PHE	498	23.691	43.637	59.189	1.00
45	ATOM 32.59	2627	CD1	PHE	498	25.046	43.393	59.165	1.00
	ATOM 34.85	2628	CD2	PHE	498	22.824	42.549	59.274	1.00
50	ATOM 33.04	2629	CE1	PHE	498	25.547	42.077	59.227	1.00
	ATOM 32.20	2630	CE2	PHE	498	23.298	41.231	59.338	1.00
	ATOM 35.12	2631	CZ	PHE	498	24.670	41.003	59.313	1.00
55	ATOM 26.82	2632	C	PHE	498	23.914	45.348	56.797	1.00
	ATOM 27.45	2633	O	PHE	498	25.036	45.093	56.358	1.00

5	ATOM 28.64	2634	N	THR	499	22.795	45.074	56.130	1.00
	ATOM 32.01	2636	CA	THR	499	22.820	44.387	54.844	1.00
	ATOM 31.10	2637	CB	THR	499	21.409	43.887	54.410	1.00
	ATOM 33.42	2638	OG1	THR	499	20.471	44.961	54.452	1.00
10	ATOM 32.06	2640	CG2	THR	499	20.925	42.811	55.340	1.00
	ATOM 34.11	2641	C	THR	499	23.464	45.193	53.736	1.00
	ATOM 36.15	2642	O	THR	499	23.686	44.677	52.648	1.00
	ATOM 35.54	2643	N	ALA	500	23.781	46.454	54.026	1.00
15	ATOM 37.58	2645	CA	ALA	500	24.417	47.346	53.062	1.00
	ATOM 37.42	2646	CB	ALA	500	23.808	48.744	53.152	1.00
	ATOM 38.52	2647	C	ALA	500	25.920	47.409	53.343	1.00
	ATOM 39.26	2648	O	ALA	500	26.746	47.377	52.411	1.00
20	ATOM 37.64	2649	N	THR	501	26.278	47.516	54.625	1.00
	ATOM 38.55	2651	CA	THR	501	27.684	47.556	55.016	1.00
	ATOM 38.57	2652	CB	THR	501	27.898	48.237	56.416	1.00
	ATOM 34.01	2653	OG1	THR	501	27.373	47.410	57.466	1.00
25	ATOM 36.76	2655	CG2	THR	501	27.241	49.626	56.465	1.00
	ATOM 39.81	2656	C	THR	501	28.236	46.119	55.047	1.00
	ATOM 40.00	2657	O	THR	501	27.714	45.260	54.289	1.00
	ATOM 40.98	2658	OT	THR	501	29.166	45.854	55.848	1.00
30	ATOM 13.25	2659	OH2	TIP	1	21.607	29.808	74.673	1.00
	ATOM 8.18	2662	OH2	TIP	6	16.481	32.964	74.773	1.00
	ATOM 8.60	2665	OH2	TIP	7	24.345	68.868	70.468	1.00
	ATOM 8.12	2668	OH2	TIP	8	3.800	16.878	94.895	1.00
35	ATOM 9.07	2671	OH2	TIP	9	18.122	62.115	79.618	1.00
	ATOM 17.42	2674	OH2	TIP	10	16.780	62.091	62.320	1.00
	ATOM 3.72	2677	OH2	TIP	11	25.046	50.597	80.016	1.00
	ATOM 7.12	2680	OH2	TIP	12	26.577	31.808	75.342	1.00
40	ATOM 7.12	2683	OH2	TIP	13	25.262	21.524	76.974	1.00

	ATOM 13.69	2686	OH2 TIP	14	3.750	51.832	76.137	1.00
	22.70	2689	OH2 TIP	15	32.763	40.036	77.507	1.00
5	13.17	2692	OH2 TIP	16	23.035	20.546	78.042	1.00
	20.48	2695	OH2 TIP	17	7.604	53.997	63.857	1.00
10	12.66	2698	OH2 TIP	18	28.104	56.401	74.609	1.00
	13.82	2701	OH2 TIP	19	22.067	18.830	82.221	1.00
	8.87	2704	OH2 TIP	20	13.310	34.312	76.774	1.00
15	7.40	2707	OH2 TIP	21	7.119	57.296	104.332	1.00
	21.54	2710	OH2 TIP	22	35.615	44.422	79.595	1.00
20	13.66	2713	OH2 TIP	23	8.611	65.581	68.778	1.00
	9.70	2716	OH2 TIP	24	22.334	28.244	79.140	1.00
	21.31	2719	OH2 TIP	25	14.002	69.197	73.540	1.00
25	11.16	2722	OH2 TIP	26	13.645	55.624	79.426	1.00
	14.97	2725	OH2 TIP	27	4.291	54.619	67.027	1.00
30	11.87	2728	OH2 TIP	28	6.648	45.172	67.946	1.00
	7.20	2731	OH2 TIP	29	24.617	78.613	73.803	1.00
	22.68	2734	OH2 TIP	30	30.105	59.806	72.375	1.00
35	14.97	2737	OH2 TIP	31	25.906	23.633	78.474	1.00
	18.06	2740	OH2 TIP	32	3.150	56.882	67.884	1.00
40	23.60	2743	OH2 TIP	33	6.452	52.073	70.077	1.00
	16.40	2746	OH2 TIP	34	25.999	70.637	71.770	1.00
	8.11	2749	OH2 TIP	35	30.439	41.016	81.578	1.00
45	14.42	2752	OH2 TIP	36	13.101	71.537	72.323	1.00
	23.02	2755	OH2 TIP	37	29.388	17.926	80.825	1.00
50	23.64	2758	OH2 TIP	38	35.887	38.783	74.498	1.00
	20.03	2761	OH2 TIP	39	29.565	66.029	74.889	1.00
	15.35	2764	OH2 TIP	40	16.396	52.686	84.622	1.00
55	13.56	2767	OH2 TIP	41	4.038	43.999	85.648	1.00
	12.85	2770	OH2 TIP	42	29.895	58.350	74.470	1.00

	ATOM	2773	OH2 TIP	43	16.006	20.021	80.032	1.00
	17.93							
	ATOM	2776	OH2 TIP	44	4.726	47.653	74.993	1.00
	23.30							
5	ATOM	2779	OH2 TIP	45	15.082	76.736	76.273	1.00
	14.21							
	ATOM	2782	OH2 TIP	46	6.212	59.954	101.185	1.00
	14.52							
10	ATOM	2785	OH2 TIP	47	14.038	45.946	83.586	1.00
	10.46							
	ATOM	2788	OH2 TIP	48	14.035	25.017	81.228	1.00
	29.03							
	ATOM	2791	OH2 TIP	49	10.652	40.732	67.376	1.00
	10.79							
15	ATOM	2794	OH2 TIP	50	33.261	42.026	62.917	1.00
	19.02							
	ATOM	2797	OH2 TIP	51	6.599	57.993	76.906	1.00
	15.26							
20	ATOM	2800	OH2 TIP	53	6.156	57.374	65.551	1.00
	27.15							
	ATOM	2803	OH2 TIP	54	17.644	53.001	80.698	1.00
	14.74							
	ATOM	2806	OH2 TIP	55	11.433	33.376	69.389	1.00
	22.38							
25	ATOM	2809	OH2 TIP	56	12.863	36.165	79.302	1.00
	28.40							
	ATOM	2812	OH2 TIP	57	39.996	43.532	77.556	1.00
	30.23							
30	ATOM	2815	OH2 TIP	58	3.108	18.092	92.566	1.00
	23.01							
	ATOM	2818	OH2 TIP	59	13.400	23.825	95.215	1.00
	15.83							
	ATOM	2821	OH2 TIP	60	12.144	38.120	66.081	1.00
	28.53							
35	ATOM	2824	OH2 TIP	61	24.488	67.388	74.369	1.00
	19.91							
	ATOM	2827	OH2 TIP	62	43.447	40.286	77.519	1.00
	23.20							
40	ATOM	2830	OH2 TIP	63	1.187	21.662	100.301	1.00
	25.85							
	ATOM	2833	OH2 TIP	64	11.268	66.563	68.304	1.00
	18.84							
	ATOM	2836	OH2 TIP	65	4.560	48.311	66.937	1.00
	30.17							
45	ATOM	2839	OH2 TIP	66	23.895	29.206	76.838	1.00
	21.66							
	ATOM	2842	OH2 TIP	67	13.775	73.914	73.721	1.00
	15.70							
50	ATOM	2845	OH2 TIP	68	15.313	54.443	81.542	1.00
	19.77							
	ATOM	2848	OH2 TIP	69	35.474	54.860	72.471	1.00
	31.09							
	ATOM	2851	OH2 TIP	70	25.667	52.892	57.948	1.00
	45.86							
55	ATOM	2854	OH2 TIP	71	14.679	45.561	56.799	1.00
	23.99							
	ATOM	2857	OH2 TIP	73	24.498	26.195	78.508	1.00
	45.19							



	ATOM 21.03	2860	OH2 TIP	74	17.843	34.155	99.866	1.00
	ATOM 51.49	2863	OH2 TIP	76	29.878	33.436	98.172	1.00
5	ATOM 14.89	2866	OH2 TIP	77	26.142	72.935	70.592	1.00
	ATOM 15.78	2869	OH2 TIP	78	12.087	33.784	80.125	1.00
10	ATOM 11.81	2872	OH2 TIP	79	29.070	62.498	72.146	1.00
	ATOM 15.76	2875	OH2 TIP	80	26.762	65.659	74.219	1.00
	ATOM 21.65	2878	OH2 TIP	81	27.244	19.850	78.029	1.00
15	ATOM 17.60	2881	OH2 TIP	82	29.140	36.797	82.374	1.00
	ATOM 18.72	2884	OH2 TIP	84	18.796	52.521	83.123	1.00
20	ATOM 25.70	2887	OH2 TIP	85	27.251	24.541	94.370	1.00
	ATOM 17.73	2890	OH2 TIP	86	-1.545	21.255	100.340	1.00
	ATOM 27.51	2893	OH2 TIP	87	15.837	35.644	101.482	1.00
25	ATOM 26.44	2896	OH2 TIP	88	34.284	38.018	76.564	1.00
	ATOM 26.05	2899	OH2 TIP	89	24.213	74.301	76.721	1.00
30	ATOM 20.22	2902	OH2 TIP	90	13.037	22.464	79.577	1.00
	ATOM 18.86	2905	OH2 TIP	91	9.767	52.390	79.457	1.00
	ATOM 19.98	2908	OH2 TIP	92	20.238	71.139	85.112	1.00
35	ATOM 22.03	2911	OH2 TIP	93	4.599	59.491	77.668	1.00
	ATOM 37.46	2914	OH2 TIP	94	10.448	58.867	64.309	1.00
40	ATOM 28.30	2917	OH2 TIP	95	17.150	52.061	87.312	1.00
	ATOM 23.01	2920	OH2 TIP	96	14.944	19.298	88.358	1.00
	ATOM 30.76	2923	OH2 TIP	98	22.606	31.977	72.585	1.00
45	ATOM 31.74	2926	OH2 TIP	99	16.389	46.097	85.748	1.00
	ATOM 22.28	2929	OH2 TIP	100	32.467	60.047	71.069	1.00
50	ATOM 24.56	2932	OH2 TIP	101	12.570	44.846	99.291	1.00
	ATOM 23.51	2935	OH2 TIP	102	15.465	38.546	102.263	1.00
	ATOM 34.08	2938	OH2 TIP	103	-2.147	21.190	94.409	1.00
55	ATOM 20.69	2941	OH2 TIP	104	23.412	43.123	93.986	1.00
	ATOM 35.11	2944	OH2 TIP	106	32.275	63.542	69.259	1.00

	ATOM	2947	OH2 TIP	109	27.641	29.169	75.550	1.00
	42.12							
	ATOM	2950	OH2 TIP	110	34.288	32.152	91.932	1.00
	35.49							
5	ATOM	2953	OH2 TIP	111	5.812	50.212	63.249	1.00
	19.89							
	ATOM	2956	OH2 TIP	112	8.168	28.072	92.374	1.00
	26.50							
10	ATOM	2959	OH2 TIP	114	11.901	21.456	95.373	1.00
	35.24							
	ATOM	2962	OH2 TIP	115	-5.840	20.011	93.287	1.00
	34.92							
	ATOM	2965	OH2 TIP	116	34.337	49.043	60.740	1.00
	24.03							
15	ATOM	2968	OH2 TIP	117	15.413	40.101	91.364	1.00
	15.29							
	ATOM	2971	OH2 TIP	119	13.005	30.660	72.127	1.00
	31.18							
20	ATOM	2974	OH2 TIP	120	29.150	70.914	70.714	1.00
	37.66							
	ATOM	2977	OH2 TIP	121	6.283	34.776	76.059	1.00
	18.99							
	ATOM	2980	OH2 TIP	122	26.184	75.068	74.889	1.00
	33.22							
25	ATOM	2983	OH2 TIP	123	40.357	38.872	69.510	1.00
	42.15							
	ATOM	2986	OH2 TIP	125	24.270	25.656	95.508	1.00
	23.81							
30	ATOM	2989	OH2 TIP	126	26.877	26.802	73.517	1.00
	25.85							
	ATOM	2992	OH2 TIP	127	34.779	35.873	70.723	1.00
	29.26							
	ATOM	2995	OH2 TIP	133	23.187	58.759	84.297	1.00
	26.34							
35	ATOM	2998	OH2 TIP	134	23.576	54.423	85.628	1.00
	37.02							
	ATOM	3001	OH2 TIP	136	19.455	59.322	89.181	1.00
	38.92							
40	ATOM	3004	OH2 TIP	137	11.696	59.602	87.696	1.00
	32.60							
	ATOM	3007	OH2 TIP	138	12.636	69.530	76.584	1.00
	37.94							
	ATOM	3010	OH2 TIP	140	26.613	28.113	77.816	1.00
	25.26							
45	ATOM	3013	OH2 TIP	142	27.818	61.288	62.778	1.00
	30.40							
	ATOM	3016	OH2 TIP	143	3.206	49.856	71.371	1.00
	42.17							
50	ATOM	3019	OH2 TIP	146	2.534	52.633	67.963	1.00
	43.02							
	ATOM	3022	OH2 TIP	147	25.577	46.460	95.088	1.00
	33.95							
	ATOM	3025	OH2 TIP	149	9.759	51.941	89.536	1.00
	35.56							
55	ATOM	3028	OH2 TIP	150	12.752	31.552	74.994	1.00
	27.35							
	ATOM	3031	OH2 TIP	151	12.093	29.315	75.972	1.00
	25.75							

	ATOM	3034	OH2 TIP	152	21.842	59.026	87.281	1.00
	31.48							
	ATOM	3037	OH2 TIP	153	11.270	44.335	57.695	1.00
	27.59							
5	ATOM	3040	OH2 TIP	154	14.539	59.954	88.025	1.00
	30.50							
	ATOM	3043	OH2 TIP	156	4.272	28.080	96.025	1.00
	47.65							
10	ATOM	3046	OH2 TIP	157	17.859	42.053	92.196	1.00
	29.57							
	ATOM	3049	OH2 TIP	158	22.647	41.349	83.263	1.00
	39.70							
	ATOM	3052	OH2 TIP	159	11.322	46.623	90.716	1.00
	31.92							
15	ATOM	3055	OH2 TIP	161	2.712	52.383	89.710	1.00
	33.22							
	ATOM	3058	OH2 TIP	162	1.287	52.867	87.116	1.00
	44.83							
20	ATOM	3061	OH2 TIP	165	27.002	63.572	86.923	1.00
	29.86							
	ATOM	3064	OH2 TIP	166	16.412	64.181	68.052	1.00
	15.25							
	ATOM	3067	OH2 TIP	167	6.518	17.919	94.625	1.00
	22.60							
25	ATOM	3070	OH2 TIP	168	3.236	56.796	74.190	1.00
	24.04							
	ATOM	3073	OH2 TIP	170	22.853	45.908	85.283	1.00
	31.68							
30	ATOM	3076	OH2 TIP	171	23.845	31.720	74.930	1.00
	24.61							
	ATOM	3079	OH2 TIP	173	12.173	62.934	61.143	1.00
	35.38							
	ATOM	3082	OH2 TIP	174	7.573	21.577	91.113	1.00
	25.92							
35	ATOM	3085	OH2 TIP	175	6.408	34.865	93.539	1.00
	25.00							
	ATOM	3088	OH2 TIP	176	6.879	44.086	90.136	1.00
	52.52							
40	ATOM	3091	OH2 TIP	178	0.615	45.299	71.526	1.00
	33.57							
	ATOM	3094	OH2 TIP	182	20.199	39.536	93.672	1.00
	32.42							
	ATOM	3097	OH2 TIP	183	-0.763	50.856	82.292	1.00
	42.39							
45	ATOM	3100	OH2 TIP	188	34.519	25.551	92.081	1.00
	43.60							
	ATOM	3103	OH2 TIP	189	33.409	56.361	79.281	1.00
	22.55							
50	ATOM	3106	OH2 TIP	192	35.529	52.146	76.123	1.00
	33.38							
	ATOM	3109	OH2 TIP	198	8.143	34.005	71.774	1.00
	35.46							
	ATOM	3112	OH2 TIP	205	11.395	37.978	80.175	1.00
	52.83							
55	ATOM	3115	OH2 TIP	206	13.568	38.792	104.153	1.00
	43.36							
	ATOM	3118	OH2 TIP	209	28.674	52.942	57.817	1.00
	43.27							

	ATOM 40.43	3121	OH2	TIP	210	27.341	25.580	77.094	1.00
	ATOM 31.26	3124	OH2	TIP	211	33.895	35.700	78.552	1.00
5	ATOM 36.60	3127	OH2	TIP	213	36.039	41.473	62.983	1.00
	ATOM 40.38	3130	OH2	TIP	215	3.114	32.257	85.950	1.00
10	ATOM 27.87	3133	OH2	TIP	216	29.196	19.501	86.311	1.00
	ATOM 29.80	3136	OH2	TIP	217	1.734	38.940	80.274	1.00
	ATOM 49.80	3139	OH2	TIP	218	13.815	67.086	76.838	1.00
15	ATOM 46.16	3142	OH2	TIP	219	6.229	43.091	87.714	1.00
	ATOM 36.89	3145	OH2	TIP	221	15.410	51.944	90.086	1.00
20	ATOM 49.48	3148	OH2	TIP	225	7.645	32.694	69.299	1.00
	ATOM 34.31	3151	OH2	TIP	232	38.235	43.952	79.309	1.00
	ATOM 42.44	3154	OH2	TIP	233	16.673	67.605	66.736	1.00
25	ATOM 37.59	3157	OH2	TIP	238	31.695	33.929	65.363	1.00
	ATOM 30.95	3160	OH2	TIP	239	39.136	48.319	75.756	1.00
30	ATOM 37.06	3163	OH2	TIP	246	13.766	42.285	91.193	1.00
	ATOM 42.77	3166	OH2	TIP	250	10.830	20.805	92.924	1.00
	ATOM 52.46	3169	OH2	TIP	253	15.397	18.714	83.768	1.00
35	ATOM 26.19	3172	OH2	TIP	904	20.775	41.091	87.469	1.00
	ATOM 33.83	3175	OH2	TIP	905	14.259	45.126	90.442	1.00
40	ATOM 32.08	3178	OH2	TIP	906	19.912	46.870	90.941	1.00
	ATOM 34.56	3181	OH2	TIP	907	19.475	44.746	88.140	1.00
	ATOM 27.28	3184	OH2	TIP	908	23.007	45.712	92.056	1.00
45	ATOM 13.29	3187	OH2	TIP	909	16.243	39.301	84.268	1.00
	ATOM 20.89	3190	OH2	TIP	910	30.673	39.068	83.162	1.00
50	ATOM 30.39	3193	OH2	TIP	911	32.869	40.494	79.855	1.00
	ATOM 31.62	3196	OH2	TIP	912	34.067	33.748	75.534	1.00
	ATOM 11.83	3199	S	SO4	901	20.211	32.729	69.365	1.00
55	ATOM 8.25	3200	O1	SO4	901	19.917	32.055	70.576	1.00
	ATOM 11.09	3201	O2	SO4	901	18.988	33.154	68.793	1.00

	ATOM 9.69	3202	O3	SO4	901	21.079	33.859	69.664	1.00
	ATOM 8.29	3203	O4	SO4	901	20.891	31.903	68.483	1.00
5	ATOM 33.31	3204	S	SO4	902	39.416	37.847	73.393	1.00
	ATOM 36.88	3205	O1	SO4	902	38.532	36.720	73.276	1.00
10	ATOM 30.80	3206	O2	SO4	902	40.315	37.846	72.295	1.00
	ATOM 32.33	3207	O3	SO4	902	38.625	39.033	73.415	1.00
	ATOM 30.64	3208	O4	SO4	902	40.103	37.742	74.636	1.00
15	ATOM 45.64	3209	S	SO4	903	14.903	66.497	81.052	1.00
	ATOM 45.40	3210	O1	SO4	903	14.611	65.314	80.325	1.00
20	ATOM 39.04	3211	O2	SO4	903	13.851	67.466	80.876	1.00
	ATOM 41.16	3212	O3	SO4	903	15.056	66.123	82.449	1.00
	ATOM 42.64	3213	O4	SO4	903	16.087	67.039	80.513	1.00
25	ATOM 18.65	3214	C1	TES	1	25.406	37.409	83.740	1.00
	ATOM 17.59	3215	N2	TES	1	26.303	36.893	82.876	1.00
30	ATOM 16.60	3216	C3	TES	1	26.063	35.914	82.050	1.00
	ATOM 17.34	3217	N4	TES	1	24.789	35.339	82.066	1.00
	ATOM 17.94	3218	C5	TES	1	23.880	35.860	82.935	1.00
35	ATOM 19.34	3219	C6	TES	1	24.124	36.952	83.843	1.00
	ATOM 20.90	3220	C8	TES	1	23.433	37.629	84.848	1.00
40	ATOM 23.47	3221	N9	TES	1	24.295	38.548	85.351	1.00
	ATOM 20.41	3222	N10	TES	1	25.526	38.402	84.658	1.00
	ATOM 24.35	3223	C11	TES	1	22.064	37.416	85.360	1.00
45	ATOM 21.75	3224	C12	TES	1	21.559	36.094	85.645	1.00
	ATOM 19.80	3225	C13	TES	1	20.245	35.936	86.147	1.00
50	ATOM 21.04	3226	C14	TES	1	19.451	37.077	86.345	1.00
	ATOM 24.23	3227	C15	TES	1	19.913	38.376	86.105	1.00
	ATOM 24.86	3228	C16	TES	1	21.245	38.551	85.600	1.00
55	ATOM 24.39	3229	CL2	TES	1	17.843	36.693	86.919	1.00
	ATOM 21.28	3230	C22	TES	1	26.723	39.233	85.003	1.00

	ATOM	3231	C23	TES	1	27.086	40.186	83.849	1.00
	22.71								
	ATOM	3232	C27	TES	1	27.859	38.378	85.381	1.00
	19.02								
5	ATOM	3233	C31	TES	1	26.327	40.092	86.267	1.00
	20.75								
	ATOM	3234	N35	TES	1	22.684	35.170	82.804	1.00
	17.59								
10	ATOM	3235	H1	TES	1	24.169	39.201	86.141	1.00
	20.00								
	ATOM	3236	H2	TES	1	21.917	35.543	83.360	1.00
	20.00								
	ATOM	3237	H3	TES	1	22.707	34.421	82.235	1.00
	20.00								
15	END								

Table 2  
Coordinates of Lck bound with AMP-PNP

5	B	Atom				X	Y	Z	Occ
		Type	Res	#					
10	ATOM 37.83	1 CB	LYS	231		1.530	26.649	88.787	1.00
	ATOM 37.44	2 CG	LYS	231		0.717	26.584	87.564	1.00
	ATOM 38.84	3 CD	LYS	231		1.283	25.595	86.606	1.00
15	ATOM 43.58	4 CE	LYS	231		0.371	25.484	85.401	1.00
	ATOM 44.98	5 NZ	LYS	231		0.880	24.421	84.468	1.00
20	ATOM 35.81	9 C	LYS	231		1.837	27.516	91.023	1.00
	ATOM 33.83	10 O	LYS	231		2.856	28.159	91.228	1.00
	ATOM 39.11	13 N	LYS	231		1.192	29.091	89.212	1.00
25	ATOM 36.90	15 CA	LYS	231		1.048	27.708	89.771	1.00
	ATOM 35.23	16 N	PRO	232		1.341	26.653	91.909	1.00
30	ATOM 36.98	17 CD	PRO	232		0.047	25.938	91.884	1.00
	ATOM 32.73	18 CA	PRO	232		2.077	26.404	93.149	1.00
	ATOM 32.14	19 CB	PRO	232		1.147	25.423	93.888	1.00
35	ATOM 35.96	20 CG	PRO	232		0.326	24.779	92.787	1.00
	ATOM 31.15	21 C	PRO	232		3.482	25.814	92.739	1.00
40	ATOM 27.60	22 O	PRO	232		3.577	25.249	91.649	1.00
	ATOM 31.09	23 N	TRP	233		4.559	26.010	93.532	1.00
	ATOM 30.95	25 CA	TRP	233		5.943	25.510	93.202	1.00
45	ATOM 28.05	26 CB	TRP	233		7.057	25.851	94.244	1.00
	ATOM 25.65	27 CG	TRP	233		6.983	25.142	95.538	1.00
50	ATOM 24.06	28 CD2	TRP	233		7.393	23.796	95.821	1.00
	ATOM 24.26	29 CE2	TRP	233		7.102	23.557	97.170	1.00
	ATOM 21.80	30 CE3	TRP	233		7.972	22.773	95.049	1.00
55	ATOM 26.39	31 CD1	TRP	233		6.491	25.638	96.677	1.00
	ATOM 26.21	32 NE1	TRP	233		6.552	24.700	97.673	1.00

	ATOM 24.85	34	CZ2	TRP	233	7.361	22.322	97.800	1.00
	ATOM 20.36	35	CZ3	TRP	233	8.232	21.532	95.675	1.00
5	ATOM 19.92	36	CH2	TRP	233	7.922	21.324	97.044	1.00
	ATOM 31.74	37	C	TRP	233	6.015	24.011	92.831	1.00
10	ATOM 30.34	38	O	TRP	233	6.824	23.632	91.973	1.00
	ATOM 33.48	39	N	TRP	234	5.101	23.199	93.409	1.00
	ATOM 33.75	41	CA	TRP	234	5.018	21.725	93.154	1.00
15	ATOM 31.16	42	CB	TRP	234	4.216	20.921	94.207	1.00
	ATOM 28.34	43	CG	TRP	234	2.776	21.333	94.488	1.00
20	ATOM 26.29	44	CD2	TRP	234	2.398	22.201	95.524	1.00
	ATOM 26.45	45	CE2	TRP	234	0.986	22.293	95.534	1.00
	ATOM 26.00	46	CE3	TRP	234	3.139	22.935	96.456	1.00
25	ATOM 26.78	47	CD1	TRP	234	1.607	20.920	93.881	1.00
	ATOM 27.76	48	NE1	TRP	234	0.539	21.498	94.515	1.00
30	ATOM 27.03	50	CZ2	TRP	234	0.295	23.095	96.450	1.00
	ATOM 28.64	51	CZ3	TRP	234	2.474	23.722	97.353	1.00
	ATOM 27.62	52	CH2	TRP	234	1.051	23.802	97.354	1.00
35	ATOM 34.53	53	C	TRP	234	4.401	21.432	91.833	1.00
	ATOM 33.15	54	O	TRP	234	4.297	20.267	91.391	1.00
40	ATOM 36.00	55	N	GLU	235	3.889	22.479	91.240	1.00
	ATOM 38.26	57	CA	GLU	235	3.290	22.335	89.953	1.00
	ATOM 38.59	58	CB	GLU	235	1.819	22.698	90.017	1.00
45	ATOM 39.84	59	CG	GLU	235	0.981	21.786	90.873	1.00
	ATOM 42.45	60	CD	GLU	235	-0.510	21.994	90.638	1.00
50	ATOM 42.87	61	OE1	GLU	235	-0.852	22.819	89.772	1.00
	ATOM 43.99	62	OE2	GLU	235	-1.345	21.334	91.302	1.00
	ATOM 39.64	63	C	GLU	235	4.016	23.215	88.938	1.00
55	ATOM 38.07	64	O	GLU	235	3.917	22.999	87.735	1.00
	ATOM 42.18	65	N	ASP	236	4.736	24.216	89.429	1.00



	ATOM 43.34	67	CA	ASP	236	5.441	25.112	88.536	1.00
	ATOM 45.25	68	CB	ASP	236	6.114	26.227	89.346	1.00
5	ATOM 47.09	69	CG	ASP	236	6.619	27.343	88.470	1.00
	ATOM 52.49	70	OD1	ASP	236	5.786	28.160	88.049	1.00
10	ATOM 47.48	71	OD2	ASP	236	7.821	27.369	88.144	1.00
	ATOM 42.58	72	C	ASP	236	6.478	24.368	87.662	1.00
	ATOM 44.15	73	O	ASP	236	7.409	23.729	88.171	1.00
15	ATOM 38.06	74	N	GLU	237	6.365	24.526	86.356	1.00
	ATOM 36.59	76	CA	GLU	237	7.300	23.894	85.439	1.00
20	ATOM 36.46	77	CB	GLU	237	6.800	24.046	84.009	1.00
	ATOM 43.75	78	CG	GLU	237	6.123	25.389	83.715	1.00
	ATOM 46.78	79	CD	GLU	237	4.751	25.561	84.434	1.00
25	ATOM 47.53	80	OE1	GLU	237	3.951	24.594	84.433	1.00
	ATOM 47.26	81	OE2	GLU	237	4.538	26.619	85.093	1.00
30	ATOM 36.28	82	C	GLU	237	8.765	24.357	85.526	1.00
	ATOM 36.06	83	O	GLU	237	9.645	23.675	85.022	1.00
	ATOM 35.21	84	N	TRP	238	9.022	25.506	86.153	1.00
35	ATOM 31.93	86	CA	TRP	238	10.378	26.006	86.255	1.00
	ATOM 28.95	87	CB	TRP	238	10.415	27.504	86.030	1.00
40	ATOM 24.79	88	CG	TRP	238	10.089	27.881	84.648	1.00
	ATOM 25.38	89	CD2	TRP	238	8.795	28.214	84.154	1.00
	ATOM 26.85	90	CE2	TRP	238	8.955	28.675	82.835	1.00
45	ATOM 21.63	91	CE3	TRP	238	7.518	28.167	84.703	1.00
	ATOM 23.77	92	CD1	TRP	238	10.963	28.112	83.628	1.00
50	ATOM 26.71	93	NE1	TRP	238	10.297	28.600	82.543	1.00
	ATOM 30.52	95	CZ2	TRP	238	7.884	29.088	82.060	1.00
	ATOM 26.61	96	CZ3	TRP	238	6.468	28.567	83.946	1.00
55	ATOM 30.73	97	CH2	TRP	238	6.639	29.024	82.633	1.00
	ATOM 31.26	98	C	TRP	238	11.090	25.653	87.544	1.00

	ATOM 30.87	99	O	TRP	238	12.303	25.692	87.607	1.00
	ATOM 30.15	100	N	GLU	239	10.341	25.230	88.553	1.00
5	ATOM 29.70	102	CA	GLU	239	10.937	24.880	89.825	1.00
	ATOM 31.38	103	CB	GLU	239	9.813	24.679	90.828	1.00
10	ATOM 38.59	104	CG	GLU	239	10.070	25.020	92.294	1.00
	ATOM 44.86	105	CD	GLU	239	10.220	26.411	92.781	1.00
	ATOM 49.26	106	OE1	GLU	239	10.022	27.301	92.330	1.00
15	ATOM 46.75	107	OE2	GLU	239	10.944	26.554	93.684	1.00
	ATOM 29.69	108	C	GLU	239	11.820	23.606	89.719	1.00
20	ATOM 31.42	109	O	GLU	239	11.423	22.617	89.105	1.00
	ATOM 26.63	110	N	VAL	240	13.029	23.667	90.268	1.00
	ATOM 24.23	112	CA	VAL	240	13.895	22.515	90.225	1.00
25	ATOM 24.53	113	CB	VAL	240	15.051	22.623	89.200	1.00
	ATOM 22.09	114	CG1	VAL	240	14.515	22.722	87.795	1.00
30	ATOM 23.29	115	CG2	VAL	240	16.014	23.755	89.573	1.00
	ATOM 23.64	116	C	VAL	240	14.536	22.314	91.560	1.00
	ATOM 22.01	117	O	VAL	240	14.713	23.257	92.343	1.00
35	ATOM 22.17	118	N	PRO	241	14.831	21.056	91.875	1.00
	ATOM 21.25	119	CD	PRO	241	14.386	19.838	91.140	1.00
40	ATOM 20.23	120	CA	PRO	241	15.470	20.731	93.144	1.00
	ATOM 19.32	121	CB	PRO	241	15.609	19.216	93.056	1.00
	ATOM 18.66	122	CG	PRO	241	14.392	18.797	92.217	1.00
45	ATOM 21.05	123	C	PRO	241	16.844	21.447	93.139	1.00
	ATOM 20.90	124	O	PRO	241	17.469	21.530	92.084	1.00
50	ATOM 20.76	125	N	ARG	242	17.309	21.945	94.280	1.00
	ATOM 23.13	127	CA	ARG	242	18.578	22.668	94.334	1.00
	ATOM 22.78	128	CB	ARG	242	18.785	23.378	95.671	1.00
55	ATOM 25.41	129	CG	ARG	242	19.866	24.477	95.614	1.00
	ATOM 27.06	130	CD	ARG	242	20.298	24.961	96.983	1.00

	ATOM 33.41	131	NE	ARG	242	19.164	25.381	97.805	1.00
	ATOM 30.59	133	CZ	ARG	242	18.606	26.587	97.755	1.00
5	ATOM 29.32	134	NH1	ARG	242	19.084	27.491	96.913	1.00
	ATOM 28.47	137	NH2	ARG	242	17.573	26.883	98.537	1.00
10	ATOM 25.38	140	C	ARG	242	19.771	21.756	94.062	1.00
	ATOM 24.61	141	O	ARG	242	20.826	22.221	93.588	1.00
	ATOM 25.40	142	N	GLU	243	19.579	20.460	94.289	1.00
15	ATOM 25.43	144	CA	GLU	243	20.616	19.463	94.059	1.00
	ATOM 27.61	145	CB	GLU	243	20.187	18.071	94.594	1.00
20	ATOM 34.52	146	CG	GLU	243	20.021	17.995	96.094	1.00
	ATOM 37.01	147	CD	GLU	243	18.757	18.664	96.591	1.00
	ATOM 35.85	148	OE1	GLU	243	17.840	18.855	95.774	1.00
25	ATOM 41.46	149	OE2	GLU	243	18.673	18.959	97.802	1.00
	ATOM 24.43	150	C	GLU	243	20.935	19.324	92.577	1.00
30	ATOM 24.98	151	O	GLU	243	21.954	18.771	92.215	1.00
	ATOM 23.29	152	N	THR	244	20.064	19.801	91.708	1.00
	ATOM 23.34	154	CA	THR	244	20.327	19.671	90.282	1.00
35	ATOM 24.16	155	CB	THR	244	19.039	19.875	89.465	1.00
	ATOM 21.58	156	OG1	THR	244	18.630	21.238	89.603	1.00
40	ATOM 22.81	158	CG2	THR	244	17.915	18.920	89.940	1.00
	ATOM 21.94	159	C	THR	244	21.357	20.705	89.811	1.00
	ATOM 21.51	160	O	THR	244	21.788	20.701	88.666	1.00
45	ATOM 20.26	161	N	LEU	245	21.789	21.564	90.722	1.00
	ATOM 20.18	163	CA	LEU	245	22.690	22.632	90.349	1.00
50	ATOM 18.93	164	CB	LEU	245	22.052	24.023	90.633	1.00
	ATOM 16.80	165	CG	LEU	245	20.724	24.367	89.916	1.00
	ATOM 15.50	166	CD1	LEU	245	20.043	25.508	90.638	1.00
55	ATOM 15.07	167	CD2	LEU	245	20.982	24.715	88.479	1.00
	ATOM 21.46	168	C	LEU	245	24.036	22.623	91.016	1.00

	ATOM	169	O	LEU	245	24.169	22.329	92.198	1.00
	24.16								
	ATOM	170	N	LYS	246	25.051	22.993	90.254	1.00
	23.10								
5	ATOM	172	CA	LYS	246	26.392	23.085	90.808	1.00
	23.12								
	ATOM	173	CB	LYS	246	27.313	22.016	90.237	1.00
	24.89								
10	ATOM	174	CG	LYS	246	28.652	22.045	90.899	1.00
	30.08								
	ATOM	175	CD	LYS	246	29.686	21.303	90.095	1.00
	36.11								
	ATOM	176	CE	LYS	246	31.042	21.386	90.774	1.00
	40.50								
15	ATOM	177	NZ	LYS	246	32.093	20.897	89.831	1.00
	45.53								
	ATOM	181	C	LYS	246	26.934	24.456	90.410	1.00
	22.14								
20	ATOM	182	O	LYS	246	27.057	24.716	89.224	1.00
	23.00								
	ATOM	183	N	LEU	247	27.241	25.324	91.381	0.60
	20.92								
	ATOM	185	CA	LEU	247	27.773	26.656	91.056	0.60
	18.66								
25	ATOM	186	CB	LEU	247	27.342	27.740	92.060	0.60
	14.86								
	ATOM	187	CG	LEU	247	25.951	27.816	92.744	0.60
	10.67								
30	ATOM	188	CD1	LEU	247	25.806	29.118	93.471	0.60
	11.61								
	ATOM	189	CD2	LEU	247	24.758	27.644	91.820	0.60
	10.00								
	ATOM	190	C	LEU	247	29.284	26.537	90.968	0.60
	19.26								
35	ATOM	191	O	LEU	247	29.980	26.146	91.902	0.60
	17.61								
	ATOM	192	N	VAL	248	29.785	26.861	89.793	1.00
	21.68								
40	ATOM	194	CA	VAL	248	31.188	26.704	89.567	1.00
	25.27								
	ATOM	195	CB	VAL	248	31.398	25.950	88.256	1.00
	23.58								
	ATOM	196	CG1	VAL	248	32.861	25.815	87.968	1.00
	25.11								
45	ATOM	197	CG2	VAL	248	30.759	24.565	88.369	1.00
	26.69								
	ATOM	198	C	VAL	248	32.074	27.942	89.644	1.00
	25.79								
	ATOM	199	O	VAL	248	33.111	27.907	90.275	1.00
	26.29								
50	ATOM	200	N	GLU	249	31.646	29.054	89.079	1.00
	27.89								
	ATOM	202	CA	GLU	249	32.473	30.247	89.039	1.00
	27.88								
55	ATOM	203	CB	GLU	249	33.126	30.296	87.632	1.00
	31.84								
	ATOM	204	CG	GLU	249	33.990	31.504	87.319	1.00
	37.38								

	ATOM 41.34	205	CD	GLU	249	34.481	31.683	85.847	1.00
	ATOM 43.62	206	OE1	GLU	249	34.082	31.024	84.840	1.00
5	ATOM 44.93	207	OE2	GLU	249	35.291	32.617	85.738	1.00
	ATOM 28.46	208	C	GLU	249	31.600	31.510	89.332	1.00
10	ATOM 26.68	209	O	GLU	249	30.566	31.718	88.722	1.00
	ATOM 28.83	210	N	ARG	250	32.005	32.335	90.296	1.00
	ATOM 28.81	212	CA	ARG	250	31.226	33.534	90.635	1.00
15	ATOM 30.75	213	CB	ARG	250	31.476	33.970	92.113	1.00
	ATOM 35.96	214	CG	ARG	250	30.613	35.195	92.619	1.00
20	ATOM 41.14	215	CD	ARG	250	31.015	35.934	93.982	1.00
	ATOM 50.47	216	NE	ARG	250	32.500	35.855	94.222	1.00
	ATOM 53.39	218	CZ	ARG	250	33.085	35.446	95.148	1.00
25	ATOM 55.04	219	NH1	ARG	250	32.207	35.230	95.611	1.00
	ATOM 56.01	222	NH2	ARG	250	34.231	35.113	95.622	1.00
30	ATOM 27.28	225	C	ARG	250	31.543	34.651	89.635	1.00
	ATOM 27.02	226	O	ARG	250	32.696	35.018	89.404	1.00
	ATOM 24.93	227	N	LEU	251	30.514	35.114	88.953	1.00
35	ATOM 24.60	229	CA	LEU	251	30.719	36.123	87.965	1.00
	ATOM 22.78	230	CB	LEU	251	29.761	35.937	86.754	1.00
40	ATOM 21.71	231	CG	LEU	251	29.636	34.579	85.991	1.00
	ATOM 22.72	232	CD1	LEU	251	28.622	34.418	84.848	1.00
	ATOM 20.58	233	CD2	LEU	251	31.012	34.340	85.428	1.00
45	ATOM 25.88	234	C	LEU	251	30.502	37.514	88.575	1.00
	ATOM 26.29	235	O	LEU	251	31.101	38.489	88.127	1.00
50	ATOM 25.94	236	N	GLY	252	29.687	37.579	89.619	1.00
	ATOM 25.27	238	CA	GLY	252	29.428	38.861	90.223	1.00
	ATOM 27.18	239	C	GLY	252	28.814	38.745	91.589	1.00
55	ATOM 27.65	240	O	GLY	252	28.179	37.737	91.904	1.00
	ATOM 26.87	241	N	ALA	253	29.132	39.722	92.433	1.00

	ATOM 28.35	243	CA	ALA	253	28.619	39.799	93.789	1.00
	ATOM 28.60	244	CB	ALA	253	29.645	39.354	94.803	1.00
5	ATOM 28.94	245	C	ALA	253	28.228	41.244	94.039	1.00
	ATOM 27.71	246	O	ALA	253	28.929	42.159	93.662	1.00
10	ATOM 30.03	247	N	GLY	254	27.070	41.433	94.651	1.00
	ATOM 27.78	249	CA	GLY	254	26.590	42.763	94.929	1.00
	ATOM 28.67	250	C	GLY	254	25.759	42.786	96.191	1.00
15	ATOM 27.16	251	O	GLY	254	25.642	41.805	96.946	1.00
	ATOM 30.78	252	N	GLN	255	25.172	43.944	96.404	1.00
20	ATOM 35.15	254	CA	GLN	255	24.330	44.191	97.568	1.00
	ATOM 35.64	255	CB	GLN	255	23.782	45.613	97.465	1.00
	ATOM 36.07	256	CG	GLN	255	23.052	46.111	98.684	1.00
25	ATOM 38.63	257	CD	GLN	255	22.563	47.548	98.502	1.00
	ATOM 36.80	258	OE1	GLN	255	22.941	48.261	97.544	1.00
30	ATOM 40.92	259	NE2	GLN	255	21.672	47.957	99.392	1.00
	ATOM 37.01	262	C	GLN	255	23.145	43.199	97.698	1.00
	ATOM 38.82	263	O	GLN	255	22.739	42.828	98.808	1.00
35	ATOM 35.08	264	N	PHE	256	22.618	42.734	96.575	1.00
	ATOM 34.39	266	CA	PHE	256	21.452	41.858	96.652	1.00
40	ATOM 33.93	267	CB	PHE	256	20.399	42.381	95.704	1.00
	ATOM 35.82	268	CG	PHE	256	20.120	43.841	95.887	1.00
	ATOM 37.69	269	CD1	PHE	256	19.590	44.310	97.084	1.00
45	ATOM 37.17	270	CD2	PHE	256	20.417	44.751	94.882	1.00
	ATOM 39.52	271	CE1	PHE	256	19.366	45.658	97.269	1.00
50	ATOM 37.23	272	CE2	PHE	256	20.190	46.117	95.065	1.00
	ATOM 38.55	273	CZ	PHE	256	19.668	46.569	96.253	1.00
	ATOM 35.30	274	C	PHE	256	21.690	40.393	96.391	1.00
55	ATOM 34.61	275	O	PHE	256	20.742	39.606	96.244	1.00
	ATOM 35.29	276	N	GLY	257	22.957	40.020	96.287	1.00

	ATOM 33.59	278	CA	GLY	257	23.243	38.632	96.046	1.00
	ATOM 32.61	279	C	GLY	257	24.363	38.465	95.062	1.00
5	ATOM 33.22	280	O	GLY	257	25.185	39.363	94.849	1.00
	ATOM 30.90	281	N	GLU	258	24.323	37.349	94.367	1.00
10	ATOM 29.26	283	CA	GLU	258	25.397	37.071	93.465	1.00
	ATOM 32.05	284	CB	GLU	258	26.401	36.157	94.173	1.00
	ATOM 37.52	285	CG	GLU	258	26.959	36.587	95.536	1.00
15	ATOM 41.31	286	CD	GLU	258	27.842	35.474	96.175	1.00
	ATOM 44.11	287	OE1	GLU	258	27.699	34.261	95.888	1.00
20	ATOM 43.94	288	OE2	GLU	258	28.717	35.811	96.976	1.00
	ATOM 26.26	289	C	GLU	258	24.958	36.383	92.171	1.00
	ATOM 25.25	290	O	GLU	258	23.794	35.968	92.045	1.00
25	ATOM 22.42	291	N	VAL	259	25.878	36.354	91.209	0.77
	ATOM 22.25	293	CA	VAL	259	25.746	35.693	89.893	0.77
30	ATOM 21.14	294	CB	VAL	259	25.768	36.645	88.669	0.77
	ATOM 19.21	295	CG1	VAL	259	25.740	35.819	87.320	0.77
	ATOM 20.54	296	CG2	VAL	259	24.592	37.543	88.746	0.77
35	ATOM 21.14	297	C	VAL	259	26.869	34.696	89.690	0.77
	ATOM 19.78	298	O	VAL	259	28.041	35.005	89.827	0.77
40	ATOM 21.25	299	N	TRP	260	26.429	33.502	89.315	1.00
	ATOM 20.50	301	CA	TRP	260	27.279	32.369	89.092	1.00
	ATOM 21.50	302	CB	TRP	260	26.947	31.368	90.160	1.00
45	ATOM 22.22	303	CG	TRP	260	27.438	31.859	91.376	1.00
	ATOM 23.17	304	CD2	TRP	260	28.564	31.372	92.069	1.00
50	ATOM 23.80	305	CE2	TRP	260	28.614	32.046	93.302	1.00
	ATOM 24.27	306	CE3	TRP	260	29.537	30.393	91.791	1.00
	ATOM 24.11	307	CD1	TRP	260	26.872	32.818	92.163	1.00
55	ATOM 22.67	308	NE1	TRP	260	27.573	32.931	93.336	1.00
	ATOM 27.01	310	CZ2	TRP	260	29.594	31.773	94.274	1.00

	ATOM	311	CZ3	TRP	260	30.514	30.117	92.748	1.00
	25.33								
	ATOM	312	CH2	TRP	260	30.541	30.804	93.988	1.00
	25.33								
5	ATOM	313	C	TRP	260	27.186	31.645	87.789	1.00
	20.66								
	ATOM	314	O	TRP	260	26.122	31.642	87.135	1.00
	17.41								
10	ATOM	315	N	MET	261	28.338	31.155	87.330	1.00
	22.38								
	ATOM	317	CA	MET	261	28.302	30.271	86.172	1.00
	22.42								
	ATOM	318	CB	MET	261	29.507	30.278	85.251	1.00
	24.52								
15	ATOM	319	CG	MET	261	29.443	29.097	84.252	1.00
	26.58								
	ATOM	320	SD	MET	261	30.476	27.739	84.446	1.00
	30.59								
20	ATOM	321	CE	MET	261	29.455	26.614	84.399	1.00
	32.94								
	ATOM	322	C	MET	261	28.214	28.899	86.802	1.00
	21.77								
	ATOM	323	O	MET	261	28.940	28.571	87.748	1.00
	22.16								
25	ATOM	324	N	GLY	262	27.242	28.150	86.320	1.00
	21.66								
	ATOM	326	CA	GLY	262	27.052	26.820	86.849	1.00
	17.56								
30	ATOM	327	C	GLY	262	26.566	25.840	85.828	1.00
	19.07								
	ATOM	328	O	GLY	262	26.451	26.139	84.634	1.00
	17.94								
	ATOM	329	N	TYR	263	26.303	24.646	86.348	1.00
	18.76								
35	ATOM	331	CA	TYR	263	25.796	23.497	85.560	1.00
	18.48								
	ATOM	332	CB	TYR	263	26.866	22.398	85.444	1.00
	16.81								
40	ATOM	333	CG	TYR	263	28.033	22.802	84.624	1.00
	19.76								
	ATOM	334	CD1	TYR	263	27.972	22.759	83.238	1.00
	19.56								
	ATOM	335	CE1	TYR	263	29.010	23.209	82.469	1.00
	23.28								
45	ATOM	336	CD2	TYR	263	29.175	23.295	85.223	1.00
	19.69								
	ATOM	337	CE2	TYR	263	30.247	23.745	84.467	1.00
	21.11								
50	ATOM	338	CZ	TYR	263	30.157	23.703	83.088	1.00
	23.30								
	ATOM	339	OH	TYR	263	31.184	24.173	82.298	1.00
	26.58								
	ATOM	341	C	TYR	263	24.531	22.867	86.172	1.00
	17.60								
55	ATOM	342	O	TYR	263	24.411	22.682	87.377	1.00
	16.26								
	ATOM	343	N	TYR	264	23.585	22.583	85.298	1.00
	20.34								



	ATOM 22.16	345	CA	TYR	264	22.347	21.915	85.695	1.00
	ATOM 21.31	346	CB	TYR	264	21.151	22.594	85.035	1.00
5	ATOM 23.68	347	CG	TYR	264	19.877	21.798	85.192	1.00
	ATOM 20.71	348	CD1	TYR	264	19.096	21.950	86.306	1.00
10	ATOM 23.19	349	CE1	TYR	264	17.928	21.188	86.481	1.00
	ATOM 25.63	350	CD2	TYR	264	19.486	20.866	84.226	1.00
	ATOM 25.62	351	CE2	TYR	264	18.327	20.092	84.386	1.00
15	ATOM 24.58	352	CZ	TYR	264	17.563	20.267	85.520	1.00
	ATOM 27.93	353	OH	TYR	264	16.414	19.531	85.714	1.00
20	ATOM 20.81	355	C	TYR	264	22.483	20.458	85.193	1.00
	ATOM 18.48	356	O	TYR	264	22.757	20.253	84.010	1.00
	ATOM 21.28	357	N	ASN	265	22.239	19.493	86.097	1.00
25	ATOM 21.74	359	CA	ASN	265	22.364	18.007	85.828	1.00
	ATOM 22.19	360	CB	ASN	265	21.200	17.448	85.009	1.00
30	ATOM 24.59	361	CG	ASN	265	19.870	17.305	85.774	1.00
	ATOM 23.92	362	OD1	ASN	265	19.729	17.368	86.984	1.00
	ATOM 25.24	363	ND2	ASN	265	18.837	17.117	84.962	1.00
35	ATOM 18.48	366	C	ASN	265	23.678	17.680	85.114	1.00
	ATOM 19.13	367	O	ASN	265	23.726	16.939	84.110	1.00
40	ATOM 16.90	368	N	GLY	266	24.712	18.282	85.692	1.00
	ATOM 13.15	370	CA	GLY	266	26.101	18.152	85.289	1.00
	ATOM 11.08	371	C	GLY	266	26.539	18.642	83.944	1.00
45	ATOM 16.72	372	O	GLY	266	27.651	19.128	83.813	1.00
	ATOM 8.78	373	N	HIS	267	25.661	18.613	82.964	0.49
50	ATOM 8.54	375	CA	HIS	267	26.045	18.997	81.629	0.49
	ATOM 7.49	376	CB	HIS	267	25.636	17.878	80.655	0.49
	ATOM 6.75	377	CG	HIS	267	26.316	16.573	80.920	0.49
55	ATOM 6.15	378	CD2	HIS	267	27.618	16.222	80.867	0.49
	ATOM 5.87	379	ND1	HIS	267	25.626	15.438	81.294	0.49

	ATOM 6.87	381	CE1	HIS	267	26.479	14.441	81.449	0.49
	ATOM 9.37	382	NE2	HIS	267	27.692	14.892	81.202	0.49
5	ATOM 10.78	384	C	HIS	267	25.592	20.337	81.061	0.49
	ATOM 6.89	385	O	HIS	267	26.192	20.829	80.109	0.49
10	ATOM 15.33	386	N	THR	268	24.576	20.949	81.652	1.00
	ATOM 19.30	388	CA	THR	268	24.031	22.195	81.098	1.00
	ATOM 22.06	389	CB	THR	268	22.481	22.144	81.017	1.00
15	ATOM 20.10	390	OG1	THR	268	22.131	20.956	80.294	1.00
	ATOM 18.68	392	CG2	THR	268	21.922	23.393	80.235	1.00
20	ATOM 16.30	393	C	THR	268	24.486	23.467	81.759	1.00
	ATOM 15.99	394	O	THR	268	24.114	23.738	82.876	1.00
	ATOM 16.63	395	N	LYS	269	25.315	24.197	81.034	1.00
25	ATOM 19.51	397	CA	LYS	269	25.886	25.461	81.521	1.00
	ATOM 19.25	398	CB	LYS	269	27.043	25.966	80.594	1.00
30	ATOM 23.75	399	CG	LYS	269	28.043	27.034	81.191	1.00
	ATOM 26.70	400	CD	LYS	269	29.474	26.916	80.493	1.00
	ATOM 31.11	401	CE	LYS	269	30.463	28.100	80.604	1.00
35	ATOM 32.76	402	NZ	LYS	269	31.737	27.815	79.807	1.00
	ATOM 16.84	406	C	LYS	269	24.772	26.489	81.643	1.00
40	ATOM 15.56	407	O	LYS	269	23.996	26.713	80.736	1.00
	ATOM 16.32	408	N	VAL	270	24.657	27.044	82.842	1.00
	ATOM 16.17	410	CA	VAL	270	23.629	28.040	83.104	1.00
45	ATOM 14.53	411	CB	VAL	270	22.429	27.383	83.834	1.00
	ATOM 14.57	412	CG1	VAL	270	21.785	26.336	82.951	1.00
50	ATOM 12.27	413	CG2	VAL	270	22.898	26.770	85.156	1.00
	ATOM 16.24	414	C	VAL	270	24.148	29.162	84.005	1.00
	ATOM 14.64	415	O	VAL	270	25.216	29.036	84.615	1.00
55	ATOM 16.15	416	N	ALA	271	23.411	30.271	84.052	1.00
	ATOM 17.09	418	CA	ALA	271	23.758	31.380	84.957	1.00

	ATOM 16.89	419	CB	ALA	271	23.518	32.713	84.259	1.00
	ATOM 15.23	420	C	ALA	271	22.852	31.261	86.171	1.00
5	ATOM 15.43	421	O	ALA	271	21.674	30.947	85.996	1.00
	ATOM 16.62	422	N	VAL	272	23.359	31.494	87.391	1.00
10	ATOM 17.94	424	CA	VAL	272	22.554	31.406	88.606	1.00
	ATOM 17.38	425	CB	VAL	272	22.975	30.235	89.532	1.00
	ATOM 13.54	426	CG1	VAL	272	22.120	30.200	90.800	1.00
15	ATOM 18.41	427	CG2	VAL	272	22.887	28.925	88.771	1.00
	ATOM 20.75	428	C	VAL	272	22.630	32.686	89.422	1.00
20	ATOM 22.07	429	O	VAL	272	23.697	33.090	89.885	1.00
	ATOM 22.94	430	N	LYS	273	21.497	33.335	89.600	1.00
	ATOM 23.64	432	CA	LYS	273	21.501	34.571	90.378	1.00
25	ATOM 24.86	433	CB	LYS	273	20.729	35.642	89.606	1.00
	ATOM 30.01	434	CG	LYS	273	20.744	37.112	90.077	1.00
30	ATOM 34.96	435	CD	LYS	273	19.453	37.572	89.439	1.00
	ATOM 36.43	436	CE	LYS	273	19.213	38.982	89.008	1.00
	ATOM 42.94	437	NZ	LYS	273	17.744	38.858	88.903	1.00
35	ATOM 20.45	441	C	LYS	273	20.855	34.209	91.695	1.00
	ATOM 20.86	442	O	LYS	273	19.780	33.648	91.711	1.00
40	ATOM 18.76	443	N	SER	274	21.529	34.514	92.791	0.65
	ATOM 19.42	445	CA	SER	274	21.021	34.171	94.098	0.65
	ATOM 21.93	446	CB	SER	274	22.065	33.395	94.881	0.65
45	ATOM 27.20	447	OG	SER	274	23.236	34.180	95.068	0.65
	ATOM 21.38	449	C	SER	274	20.678	35.410	94.865	0.65
50	ATOM 19.86	450	O	SER	274	21.346	36.432	94.773	0.65
	ATOM 25.45	451	N	LEU	275	19.683	35.281	95.719	1.00
	ATOM 27.40	453	CA	LEU	275	19.254	36.416	96.476	1.00
55	ATOM 27.49	454	CB	LEU	275	17.711	36.464	96.564	1.00
	ATOM 28.09	455	CG	LEU	275	16.867	37.412	97.463	1.00

	ATOM	456	CD1	LEU	275	16.942	38.885	97.101	1.00
	25.93								
	ATOM	457	CD2	LEU	275	15.416	36.936	97.377	1.00
	27.55								
5	ATOM	458	C	LEU	275	19.907	36.445	97.833	1.00
	27.78								
	ATOM	459	O	LEU	275	19.924	35.448	98.541	1.00
	29.52								
10	ATOM	460	N	LYS	276	20.457	37.600	98.179	1.00
	29.98								
	ATOM	462	CA	LYS	276	21.077	37.802	99.476	1.00
	32.68								
	ATOM	463	CB	LYS	276	21.982	39.031	99.481	1.00
	33.96								
15	ATOM	464	CG	LYS	276	22.616	39.278	100.832	1.00
	36.49								
	ATOM	465	CD	LYS	276	23.659	40.320	100.731	1.00
	42.22								
20	ATOM	466	CE	LYS	276	24.215	40.606	102.123	1.00
	47.21								
	ATOM	467	NZ	LYS	276	25.344	41.588	102.053	1.00
	51.35								
	ATOM	471	C	LYS	276	19.979	37.963	100.515	1.00
	32.85								
25	ATOM	472	O	LYS	276	19.207	38.917	100.458	1.00
	33.52								
	ATOM	473	N	ALA	277	19.946	37.078	101.504	1.00
	34.58								
30	ATOM	475	CA	ALA	277	18.855	37.188	102.460	1.00
	34.05								
	ATOM	476	CB	ALA	277	18.590	35.935	103.315	1.00
	35.34								
	ATOM	477	C	ALA	277	18.837	38.420	103.250	1.00
	34.04								
35	ATOM	478	O	ALA	277	19.822	38.880	103.840	1.00
	38.07								
	ATOM	479	N	GLY	278	17.657	38.987	103.145	1.00
	32.76								
40	ATOM	481	CA	GLY	278	17.389	40.217	103.795	1.00
	30.78								
	ATOM	482	C	GLY	278	17.837	41.403	102.975	1.00
	30.85								
	ATOM	483	O	GLY	278	17.515	42.505	103.365	1.00
	31.24								
45	ATOM	484	N	SER	279	18.526	41.242	101.852	1.00
	29.47								
	ATOM	486	CA	SER	279	18.926	42.435	101.139	1.00
	28.75								
50	ATOM	487	CB	SER	279	19.994	42.091	100.127	1.00
	27.18								
	ATOM	488	OG	SER	279	19.457	41.248	99.136	1.00
	23.79								
	ATOM	490	C	SER	279	17.741	43.107	100.434	1.00
	30.73								
55	ATOM	491	O	SER	279	17.805	44.300	100.089	1.00
	33.17								
	ATOM	492	N	MET	280	16.697	42.325	100.140	1.00
	27.39								

	ATOM 23.62	494	CA	MET	280	15.542	42.858	99.442	1.00
	ATOM 24.43	495	CB	MET	280	15.864	43.127	97.984	1.00
5	ATOM 23.94	496	CG	MET	280	16.214	41.890	97.209	1.00
	ATOM 28.79	497	SD	MET	280	16.460	42.155	95.478	1.00
10	ATOM 23.16	498	CE	MET	280	14.806	42.233	94.886	1.00
	ATOM 23.80	499	C	MET	280	14.446	41.837	99.528	1.00
	ATOM 24.10	500	O	MET	280	14.652	40.717	100.010	1.00
15	ATOM 22.93	501	N	SER	281	13.269	42.198	99.030	1.00
	ATOM 20.64	503	CA	SER	281	12.151	41.289	99.102	1.00
20	ATOM 21.35	504	CB	SER	281	10.853	41.981	98.725	1.00
	ATOM 21.47	505	OG	SER	281	9.789	41.050	98.602	1.00
	ATOM 18.82	507	C	SER	281	12.275	40.068	98.223	1.00
25	ATOM 20.53	508	O	SER	281	12.547	40.172	97.032	1.00
	ATOM 14.57	509	N	PRO	282	12.106	38.907	98.828	0.51
30	ATOM 13.40	510	CD	PRO	282	12.078	38.605	100.266	0.51
	ATOM 12.57	511	CA	PRO	282	12.195	37.703	98.034	0.51
	ATOM 11.19	512	CB	PRO	282	12.245	36.600	99.092	0.51
35	ATOM 10.35	513	CG	PRO	282	11.579	37.204	100.266	0.51
	ATOM 13.41	514	C	PRO	282	10.992	37.691	97.044	0.51
40	ATOM 9.01	515	O	PRO	282	11.091	37.097	95.979	0.51
	ATOM 18.15	516	N	ASP	283	9.903	38.442	97.324	1.00
	ATOM 17.76	518	CA	ASP	283	8.762	38.551	96.392	1.00
45	ATOM 22.85	519	CB	ASP	283	7.525	39.193	97.049	1.00
	ATOM 26.42	520	CG	ASP	283	6.351	39.362	96.061	1.00
50	ATOM 29.45	521	OD1	ASP	283	5.871	38.330	95.582	1.00
	ATOM 27.03	522	OD2	ASP	283	5.942	40.486	95.723	1.00
	ATOM 18.60	523	C	ASP	283	9.170	39.388	95.208	1.00
55	ATOM 17.98	524	O	ASP	283	8.874	39.069	94.056	1.00
	ATOM 19.23	525	N	ALA	284	9.882	40.483	95.495	1.00

	ATOM 20.69	527	CA	ALA	284	10.369	41.385	94.446	1.00
	ATOM 18.76	528	CB	ALA	284	10.904	42.671	95.096	1.00
5	ATOM 19.76	529	C	ALA	284	11.474	40.702	93.642	1.00
	ATOM 21.88	530	O	ALA	284	11.659	40.978	92.463	1.00
10	ATOM 21.00	531	N	PHE	285	12.256	39.869	94.296	1.00
	ATOM 19.86	533	CA	PHE	285	13.304	39.153	93.568	1.00
	ATOM 21.58	534	CB	PHE	285	14.156	38.362	94.576	1.00
15	ATOM 21.81	535	CG	PHE	285	15.271	37.599	93.938	1.00
	ATOM 21.74	536	CD1	PHE	285	16.415	38.254	93.505	1.00
20	ATOM 20.96	537	CD2	PHE	285	15.188	36.219	93.807	1.00
	ATOM 25.30	538	CE1	PHE	285	17.485	37.517	92.945	1.00
	ATOM 19.10	539	CE2	PHE	285	16.225	35.459	93.260	1.00
25	ATOM 23.29	540	CZ	PHE	285	17.382	36.100	92.823	1.00
	ATOM 19.96	541	C	PHE	285	12.627	38.204	92.574	1.00
30	ATOM 19.45	542	O	PHE	285	12.892	38.261	91.367	1.00
	ATOM 17.20	543	N	LEU	286	11.662	37.418	93.051	1.00
	ATOM 17.90	545	CA	LEU	286	11.009	36.439	92.166	1.00
35	ATOM 19.19	546	CB	LEU	286	10.276	35.373	92.997	1.00
	ATOM 19.01	547	CG	LEU	286	11.177	34.438	93.824	1.00
40	ATOM 18.18	548	CD1	LEU	286	10.332	33.564	94.734	1.00
	ATOM 20.50	549	CD2	LEU	286	11.998	33.593	92.853	1.00
	ATOM 18.94	550	C	LEU	286	10.095	37.006	91.112	1.00
45	ATOM 18.97	551	O	LEU	286	9.796	36.344	90.095	1.00
	ATOM 20.47	552	N	ALA	287	9.588	38.217	91.340	1.00
50	ATOM 19.43	554	CA	ALA	287	8.729	38.846	90.353	1.00
	ATOM 21.51	555	CB	ALA	287	8.328	40.262	90.816	1.00
	ATOM 19.24	556	C	ALA	287	9.406	38.916	88.981	1.00
55	ATOM 21.16	557	O	ALA	287	8.761	38.846	87.945	1.00
	ATOM 21.50	558	N	GLU	288	10.713	39.052	88.974	1.00

	ATOM 21.69	560	CA	GLU	288	11.430	39.108	87.711	1.00
	ATOM 20.35	561	CB	GLU	288	12.918	39.398	87.932	1.00
5	ATOM 20.74	562	CG	GLU	288	13.645	39.463	86.597	1.00
	ATOM 20.43	563	CD	GLU	288	15.132	39.628	86.723	1.00
10	ATOM 21.79	564	OE1	GLU	288	15.674	39.496	87.832	1.00
	ATOM 25.80	565	OE2	GLU	288	15.744	39.903	85.689	1.00
	ATOM 21.41	566	C	GLU	288	11.289	37.771	86.982	1.00
15	ATOM 19.82	567	O	GLU	288	11.076	37.738	85.775	1.00
	ATOM 23.03	568	N	ALA	289	11.425	36.672	87.720	1.00
20	ATOM 26.06	570	CA	ALA	289	11.298	35.339	87.103	1.00
	ATOM 25.97	571	CB	ALA	289	11.664	34.239	88.119	1.00
	ATOM 26.33	572	C	ALA	289	9.851	35.144	86.582	1.00
25	ATOM 24.08	573	O	ALA	289	9.638	34.651	85.467	1.00
	ATOM 26.78	574	N	ASN	290	8.866	35.549	87.372	1.00
30	ATOM 28.16	576	CA	ASN	290	7.483	35.426	86.911	1.00
	ATOM 31.30	577	CB	ASN	290	6.521	35.896	87.992	1.00
	ATOM 34.57	578	CG	ASN	290	6.545	34.976	89.195	1.00
35	ATOM 37.25	579	OD1	ASN	290	6.896	33.794	89.070	1.00
	ATOM 34.64	580	ND2	ASN	290	6.218	35.503	90.363	1.00
40	ATOM 28.72	583	C	ASN	290	7.237	36.170	85.607	1.00
	ATOM 29.41	584	O	ASN	290	6.569	35.665	84.709	1.00
	ATOM 28.18	585	N	LEU	291	7.809	37.362	85.487	1.00
45	ATOM 25.84	587	CA	LEU	291	7.664	38.119	84.240	1.00
	ATOM 26.13	588	CB	LEU	291	8.223	39.546	84.437	1.00
50	ATOM 26.10	589	CG	LEU	291	8.169	40.485	83.236	1.00
	ATOM 24.19	590	CD1	LEU	291	8.014	41.938	83.754	1.00
	ATOM 25.70	591	CD2	LEU	291	9.437	40.315	82.403	1.00
55	ATOM 23.49	592	C	LEU	291	8.366	37.411	83.085	1.00
	ATOM 23.93	593	O	LEU	291	7.844	37.383	81.992	1.00

	ATOM	594	N	MET	292	9.561	36.863	83.321	1.00
	24.90								
	ATOM	596	CA	MET	292	10.305	36.165	82.260	1.00
	24.87								
5	ATOM	597	CB	MET	292	11.686	35.687	82.745	1.00
	25.73								
	ATOM	598	CG	MET	292	12.792	36.757	82.932	1.00
	25.22								
10	ATOM	599	SD	MET	292	14.277	36.170	83.568	1.00
	24.22								
	ATOM	600	CE	MET	292	14.270	36.727	85.291	1.00
	31.98								
	ATOM	601	C	MET	292	9.499	34.964	81.724	1.00
	24.23								
15	ATOM	602	O	MET	292	9.625	34.616	80.557	1.00
	25.70								
	ATOM	603	N	LYS	293	8.677	34.329	82.561	1.00
	23.39								
20	ATOM	605	CA	LYS	293	7.841	33.210	82.072	1.00
	24.49								
	ATOM	606	CB	LYS	293	6.979	32.614	83.193	1.00
	22.46								
	ATOM	607	CG	LYS	293	7.721	31.947	84.349	1.00
	25.48								
25	ATOM	608	CD	LYS	293	6.832	31.844	85.573	1.00
	25.08								
	ATOM	609	CE	LYS	293	7.556	31.097	86.636	1.00
	25.94								
30	ATOM	610	NZ	LYS	293	6.747	31.053	87.900	1.00
	28.18								
	ATOM	614	C	LYS	293	6.920	33.656	80.922	1.00
	25.40								
	ATOM	615	O	LYS	293	6.600	32.875	80.031	1.00
	26.85								
35	ATOM	616	N	GLN	294	6.533	34.931	80.894	1.00
	25.66								
	ATOM	618	CA	GLN	294	5.656	35.392	79.822	1.00
	24.99								
40	ATOM	619	CB	GLN	294	4.719	36.481	80.333	1.00
	25.55								
	ATOM	620	CG	GLN	294	3.972	36.097	81.601	1.00
	23.62								
	ATOM	621	CD	GLN	294	3.143	34.849	81.413	1.00
	27.88								
45	ATOM	622	OE1	GLN	294	2.618	34.623	80.337	1.00
	31.73								
	ATOM	623	NE2	GLN	294	3.025	34.026	82.465	1.00
	30.15								
50	ATOM	626	C	GLN	294	6.381	35.945	78.632	1.00
	26.64								
	ATOM	627	O	GLN	294	5.752	36.231	77.623	1.00
	27.61								
	ATOM	628	N	LEU	295	7.671	36.191	78.776	1.00
	27.07								
55	ATOM	630	CA	LEU	295	8.445	36.748	77.682	1.00
	24.82								
	ATOM	631	CB	LEU	295	9.037	38.101	78.078	1.00
	25.86								



	ATOM 24.00	632	CG	LEU	295	8.053	39.234	78.210	1.00
	ATOM 23.30	633	CD1	LEU	295	8.764	40.471	78.728	1.00
5	ATOM 23.01	634	CD2	LEU	295	7.403	39.478	76.853	1.00
	ATOM 23.86	635	C	LEU	295	9.532	35.825	77.212	1.00
10	ATOM 26.71	636	O	LEU	295	10.719	36.061	77.458	1.00
	ATOM 21.39	637	N	GLN	296	9.102	34.838	76.429	1.00
	ATOM 18.39	639	CA	GLN	296	9.994	33.827	75.893	1.00
15	ATOM 22.05	640	CB	GLN	296	9.385	32.438	76.121	1.00
	ATOM 23.35	641	CG	GLN	296	9.167	32.095	77.578	1.00
20	ATOM 27.58	642	CD	GLN	296	8.581	30.699	77.779	1.00
	ATOM 34.77	643	OE1	GLN	296	9.000	29.747	77.149	1.00
	ATOM 29.64	644	NE2	GLN	296	7.616	30.580	78.676	1.00
25	ATOM 17.06	647	C	GLN	296	10.155	34.084	74.428	1.00
	ATOM 17.47	648	O	GLN	296	9.192	34.066	73.690	1.00
30	ATOM 13.82	649	N	HIS	297	11.401	34.301	74.008	1.00
	ATOM 12.19	651	CA	HIS	297	11.703	34.575	72.613	1.00
	ATOM 10.71	652	CB	HIS	297	11.385	36.056	72.315	1.00
35	ATOM 6.59	653	CG	HIS	297	11.467	36.409	70.878	1.00
	ATOM 5.42	654	CD2	HIS	297	10.512	36.487	69.917	1.00
40	ATOM 10.13	655	ND1	HIS	297	12.659	36.713	70.260	1.00
	ATOM 12.03	657	CE1	HIS	297	12.434	36.968	68.973	1.00
	ATOM 8.83	658	NE2	HIS	297	11.139	36.833	68.738	1.00
45	ATOM 12.25	660	C	HIS	297	13.205	34.340	72.404	1.00
	ATOM 13.62	661	O	HIS	297	13.968	34.478	73.319	1.00
50	ATOM 12.61	662	N	GLN	298	13.626	34.045	71.186	1.00
	ATOM 16.77	664	CA	GLN	298	15.030	33.831	70.931	1.00
	ATOM 16.56	665	CB	GLN	298	15.313	33.498	69.461	1.00
55	ATOM 21.12	666	CG	GLN	298	14.897	32.149	68.971	1.00
	ATOM 21.61	667	CD	GLN	298	15.538	30.934	69.743	1.00

	ATOM 19.75	668	OE1	GLN	298	14.816	30.067	70.243	1.00
	ATOM 18.05	669	NE2	GLN	298	16.865	30.882	69.820	1.00
5	ATOM 16.39	672	C	GLN	298	15.919	35.012	71.275	1.00
	ATOM 18.14	673	O	GLN	298	17.060	34.817	71.616	1.00
10	ATOM 18.02	674	N	ARG	299	15.395	36.228	71.128	1.00
	ATOM 14.74	676	CA	ARG	299	16.177	37.424	71.393	1.00
	ATOM 12.85	677	CB	ARG	299	15.751	38.528	70.447	1.00
15	ATOM 11.65	678	CG	ARG	299	15.842	38.137	68.986	1.00
	ATOM 9.41	679	CD	ARG	299	17.134	38.532	68.353	1.00
20	ATOM 14.53	680	NE	ARG	299	18.297	37.997	69.070	1.00
	ATOM 15.60	682	CZ	ARG	299	18.737	36.729	68.969	1.00
	ATOM 8.73	683	NH1	ARG	299	18.116	35.845	68.191	1.00
25	ATOM 14.55	686	NH2	ARG	299	19.814	36.334	69.638	1.00
	ATOM 12.76	689	C	ARG	299	16.175	37.896	72.821	1.00
30	ATOM 12.91	690	O	ARG	299	16.688	38.958	73.094	1.00
	ATOM 14.57	691	N	LEU	300	15.598	37.130	73.729	1.00
	ATOM 15.73	693	CA	LEU	300	15.541	37.516	75.134	1.00
35	ATOM 15.13	694	CB	LEU	300	14.067	37.756	75.559	1.00
	ATOM 15.54	695	CG	LEU	300	13.391	39.110	75.214	1.00
40	ATOM 9.79	696	CD1	LEU	300	13.400	39.375	73.735	1.00
	ATOM 14.31	697	CD2	LEU	300	11.951	39.110	75.789	1.00
	ATOM 15.89	698	C	LEU	300	16.125	36.387	75.998	1.00
45	ATOM 17.98	699	O	LEU	300	15.796	35.224	75.783	1.00
	ATOM 15.52	700	N	VAL	301	16.961	36.732	76.963	1.00
50	ATOM 15.64	702	CA	VAL	301	17.561	35.760	77.855	1.00
	ATOM 15.52	703	CB	VAL	301	18.371	36.443	78.934	1.00
	ATOM 14.98	704	CG1	VAL	301	18.748	35.486	80.060	1.00
55	ATOM 15.35	705	CG2	VAL	301	19.639	36.991	78.339	1.00
	ATOM 18.94	706	C	VAL	301	16.425	34.913	78.442	1.00

	ATOM 20.49	707	O	VAL	301	15.475	35.449	79.034	1.00
	ATOM 19.16	708	N	ARG	302	16.538	33.582	78.268	1.00
5	ATOM 18.40	710	CA	ARG	302	15.476	32.635	78.699	1.00
	ATOM 24.28	711	CB	ARG	302	15.498	31.397	77.767	1.00
10	ATOM 29.32	712	CG	ARG	302	14.178	30.536	77.655	1.00
	ATOM 36.19	713	CD	ARG	302	14.447	28.965	77.667	1.00
	ATOM 41.02	714	NE	ARG	302	13.268	28.086	77.463	1.00
15	ATOM 43.23	716	CZ	ARG	302	12.895	27.024	78.191	1.00
	ATOM 43.30	717	NH1	ARG	302	13.534	26.611	79.299	1.00
20	ATOM 47.92	720	NH2	ARG	302	12.133	26.125	77.565	1.00
	ATOM 15.80	723	C	ARG	302	15.539	32.194	80.151	1.00
	ATOM 14.82	724	O	ARG	302	16.619	31.892	80.661	1.00
25	ATOM 11.55	725	N	LEU	303	14.411	32.212	80.859	1.00
	ATOM 14.00	727	CA	LEU	303	14.399	31.709	82.233	1.00
30	ATOM 14.73	728	CB	LEU	303	13.075	32.001	82.892	1.00
	ATOM 16.56	729	CG	LEU	303	12.928	31.481	84.331	1.00
	ATOM 13.83	730	CD1	LEU	303	13.913	32.167	85.251	1.00
35	ATOM 10.17	731	CD2	LEU	303	11.462	31.725	84.820	1.00
	ATOM 17.81	732	C	LEU	303	14.569	30.168	82.150	1.00
40	ATOM 17.00	733	O	LEU	303	13.848	29.483	81.420	1.00
	ATOM 20.52	734	N	TYR	304	15.552	29.637	82.854	1.00
	ATOM 21.34	736	CA	TYR	304	15.831	28.198	82.809	1.00
45	ATOM 23.44	737	CB	TYR	304	17.339	27.989	82.930	1.00
	ATOM 27.68	738	CG	TYR	304	17.786	26.607	82.640	1.00
50	ATOM 32.52	739	CD1	TYR	304	17.696	25.605	83.614	1.00
	ATOM 31.28	740	CE1	TYR	304	18.063	24.290	83.343	1.00
	ATOM 30.83	741	CD2	TYR	304	18.265	26.265	81.385	1.00
55	ATOM 34.15	742	CE2	TYR	304	18.636	24.943	81.103	1.00
	ATOM 33.90	743	CZ	TYR	304	18.530	23.974	82.093	1.00

	ATOM 36.03	744	OH	TYR	304	18.926	22.706	81.819	1.00
	ATOM 21.96	746	C	TYR	304	15.099	27.500	83.964	1.00
5	ATOM 22.13	747	O	TYR	304	14.425	26.499	83.764	1.00
	ATOM 20.64	748	N	ALA	305	15.209	28.053	85.170	1.00
10	ATOM 18.28	750	CA	ALA	305	14.570	27.441	86.312	1.00
	ATOM 16.59	751	CB	ALA	305	15.304	26.148	86.694	1.00
	ATOM 18.49	752	C	ALA	305	14.577	28.379	87.504	1.00
15	ATOM 19.05	753	O	ALA	305	15.163	29.456	87.448	1.00
	ATOM 16.83	754	N	VAL	306	14.007	27.905	88.607	0.75
20	ATOM 15.19	756	CA	VAL	306	13.954	28.661	89.842	0.75
	ATOM 15.23	757	CB	VAL	306	12.764	29.710	89.803	0.75
	ATOM 20.64	758	CG1	VAL	306	11.927	29.459	88.605	0.75
25	ATOM 13.94	759	CG2	VAL	306	11.921	29.725	91.030	0.75
	ATOM 16.10	760	C	VAL	306	13.940	27.741	91.044	0.75
30	ATOM 15.63	761	O	VAL	306	13.514	26.582	90.963	0.75
	ATOM 17.75	762	N	VAL	307	14.561	28.206	92.116	1.00
	ATOM 21.46	764	CA	VAL	307	14.597	27.467	93.373	1.00
35	ATOM 21.01	765	CB	VAL	307	16.049	27.043	93.786	1.00
	ATOM 19.40	766	CG1	VAL	307	16.040	26.413	95.148	1.00
40	ATOM 21.25	767	CG2	VAL	307	16.626	26.084	92.774	1.00
	ATOM 25.12	768	C	VAL	307	14.007	28.478	94.364	1.00
	ATOM 26.63	769	O	VAL	307	14.662	29.445	94.772	1.00
45	ATOM 27.40	770	N	THR	308	12.746	28.257	94.690	1.00
	ATOM 29.59	772	CA	THR	308	11.950	29.075	95.580	1.00
50	ATOM 29.83	773	CB	THR	308	10.419	28.814	95.309	1.00
	ATOM 33.86	774	OG1	THR	308	10.049	29.395	94.049	1.00
	ATOM 36.10	776	CG2	THR	308	9.547	29.357	96.404	1.00
55	ATOM 29.95	777	C	THR	308	12.277	29.040	97.098	1.00
	ATOM 31.04	778	O	THR	308	11.854	29.954	97.798	1.00

	ATOM	779	N	ALA	309	12.912	27.991	97.643	1.00
	29.60								
	ATOM	781	CA	ALA	309	13.238	28.074	99.079	1.00
	30.23								
5	ATOM	782	CB	ALA	309	13.392	26.727	99.771	1.00
	29.90								
	ATOM	783	C	ALA	309	14.515	28.884	99.226	1.00
	31.24								
10	ATOM	784	O	ALA	309	15.291	29.062	98.277	1.00
	29.98								
	ATOM	785	N	GLU	310	14.854	29.175	100.460	1.00
	33.02								
	ATOM	787	CA	GLU	310	16.004	30.011	100.692	1.00
	35.30								
15	ATOM	788	CB	GLU	310	15.656	30.948	101.789	1.00
	36.75								
	ATOM	789	CG	GLU	310	15.201	32.303	101.410	1.00
	41.03								
20	ATOM	790	CD	GLU	310	14.844	33.028	102.675	1.00
	45.51								
	ATOM	791	OE1	GLU	310	15.311	32.566	103.742	1.00
	49.70								
	ATOM	792	OE2	GLU	310	14.057	33.996	102.629	1.00
	45.61								
25	ATOM	793	C	GLU	310	17.339	29.341	101.019	1.00
	36.39								
	ATOM	794	O	GLU	310	17.375	28.495	101.942	1.00
	36.98								
30	ATOM	795	N	PRO	311	18.463	29.858	100.389	1.00
	35.12								
	ATOM	796	CD	PRO	311	19.811	29.252	100.425	1.00
	35.52								
	ATOM	797	CA	PRO	311	18.465	31.010	99.427	1.00
	34.76								
35	ATOM	798	CB	PRO	311	19.946	31.334	99.245	1.00
	35.47								
	ATOM	799	CG	PRO	311	20.559	30.004	99.238	1.00
	35.08								
40	ATOM	800	C	PRO	311	17.796	30.904	98.018	1.00
	34.02								
	ATOM	801	O	PRO	311	18.086	29.989	97.268	1.00
	35.15								
	ATOM	802	N	ILE	312	17.030	31.923	97.614	1.00
	30.57								
45	ATOM	804	CA	ILE	312	16.329	31.878	96.329	1.00
	26.24								
	ATOM	805	CB	ILE	312	15.206	32.953	96.298	1.00
	27.45								
	ATOM	806	CG2	ILE	312	14.435	32.869	95.015	1.00
50	25.33								
	ATOM	807	CG1	ILE	312	14.310	32.765	97.536	1.00
	27.69								
	ATOM	808	CD1	ILE	312	13.197	33.782	97.633	1.00
	31.84								
55	ATOM	809	C	ILE	312	17.210	31.993	95.106	1.00
	23.75								
	ATOM	810	O	ILE	312	18.114	32.837	95.061	1.00
	21.09								

	ATOM 21.51	811	N	TYR	313	16.984	31.136	94.126	1.00
	ATOM 21.71	813	CA	TYR	313	17.798	31.205	92.910	1.00
5	ATOM 22.23	814	CB	TYR	313	18.534	29.892	92.611	1.00
	ATOM 24.22	815	CG	TYR	313	19.668	29.443	93.513	1.00
10	ATOM 21.28	816	CD1	TYR	313	20.291	30.304	94.391	1.00
	ATOM 24.77	817	CE1	TYR	313	21.336	29.863	95.178	1.00
	ATOM 27.05	818	CD2	TYR	313	20.119	28.124	93.449	1.00
15	ATOM 27.82	819	CE2	TYR	313	21.154	27.670	94.238	1.00
	ATOM 26.54	820	CZ	TYR	313	21.759	28.542	95.101	1.00
20	ATOM 26.31	821	OH	TYR	313	22.766	28.079	95.906	1.00
	ATOM 19.02	823	C	TYR	313	16.960	31.436	91.681	1.00
	ATOM 19.71	824	O	TYR	313	15.892	30.860	91.547	1.00
25	ATOM 17.24	825	N	ILE	314	17.465	32.248	90.770	0.82
	ATOM 16.18	827	CA	ILE	314	16.833	32.432	89.477	0.82
30	ATOM 14.02	828	CB	ILE	314	16.489	33.910	89.160	0.82
	ATOM 14.53	829	CG2	ILE	314	16.144	34.043	87.694	0.82
	ATOM 15.31	830	CG1	ILE	314	15.335	34.371	90.031	0.82
35	ATOM 13.93	831	CD1	ILE	314	14.958	35.856	89.855	0.82
	ATOM 15.65	832	C	ILE	314	17.912	31.927	88.488	0.82
40	ATOM 13.85	833	O	ILE	314	19.013	32.499	88.391	0.82
	ATOM 15.03	834	N	ILE	315	17.600	30.874	87.748	1.00
	ATOM 13.64	836	CA	ILE	315	18.543	30.294	86.817	1.00
45	ATOM 13.73	837	CB	ILE	315	18.589	28.746	86.947	1.00
	ATOM 9.69	838	CG2	ILE	315	19.637	28.154	85.991	1.00
50	ATOM 13.21	839	CG1	ILE	315	18.915	28.335	88.393	1.00
	ATOM 9.79	840	CD1	ILE	315	17.711	28.255	89.330	1.00
	ATOM 14.14	841	C	ILE	315	18.192	30.690	85.403	1.00
55	ATOM 14.62	842	O	ILE	315	17.040	30.544	84.997	1.00
	ATOM 14.85	843	N	THR	316	19.173	31.165	84.631	1.00

	ATOM 14.14	845	CA	THR	316	18.872	31.595	83.277	1.00
	ATOM 13.98	846	CB	THR	316	18.878	33.143	83.201	1.00
5	ATOM 17.04	847	OG1	THR	316	20.169	33.618	83.616	1.00
	ATOM 8.17	849	CG2	THR	316	17.800	33.726	84.118	1.00
10	ATOM 16.85	850	C	THR	316	19.839	31.078	82.216	1.00
	ATOM 17.57	851	O	THR	316	20.845	30.456	82.534	1.00
	ATOM 16.91	852	N	GLU	317	19.486	31.332	80.957	1.00
15	ATOM 16.67	854	CA	GLU	317	20.277	31.008	79.791	1.00
	ATOM 17.21	855	CB	GLU	317	19.564	31.541	78.567	1.00
20	ATOM 14.43	856	CG	GLU	317	20.222	31.261	77.252	1.00
	ATOM 18.13	857	CD	GLU	317	19.353	31.727	76.087	1.00
	ATOM 14.82	858	OE1	GLU	317	18.398	32.537	76.315	1.00
25	ATOM 13.42	859	OE2	GLU	317	19.576	31.266	74.961	1.00
	ATOM 19.07	860	C	GLU	317	21.673	31.664	79.890	1.00
30	ATOM 20.58	861	O	GLU	317	21.806	32.899	80.004	1.00
	ATOM 18.98	862	N	TYR	318	22.704	30.838	79.797	1.00
	ATOM 18.22	864	CA	TYR	318	24.067	31.333	79.909	1.00
35	ATOM 19.73	865	CB	TYR	318	25.030	30.186	80.223	1.00
	ATOM 19.63	866	CG	TYR	318	26.358	30.706	80.707	1.00
40	ATOM 22.75	867	CD1	TYR	318	26.476	31.214	81.987	1.00
	ATOM 24.78	868	CE1	TYR	318	27.677	31.676	82.465	1.00
	ATOM 19.43	869	CD2	TYR	318	27.479	30.673	79.884	1.00
45	ATOM 20.22	870	CE2	TYR	318	28.709	31.150	80.353	1.00
	ATOM 24.87	871	CZ	TYR	318	28.804	31.645	81.639	1.00
50	ATOM 27.76	872	OH	TYR	318	30.005	32.114	82.121	1.00
	ATOM 18.73	874	C	TYR	318	24.499	32.037	78.642	1.00
	ATOM 18.36	875	O	TYR	318	24.244	31.551	77.538	1.00
55	ATOM 18.80	876	N	MET	319	25.140	33.194	78.786	1.00
	ATOM 18.78	878	CA	MET	319	25.580	33.945	77.595	1.00

	ATOM 18.67	879	CB	MET	319	24.855	35.289	77.554	1.00
	ATOM 13.13	880	CG	MET	319	23.322	35.146	77.365	1.00
5	ATOM 14.87	881	SD	MET	319	22.872	34.497	75.765	1.00
	ATOM 11.13	882	CE	MET	319	23.121	35.815	74.681	1.00
10	ATOM 20.76	883	C	MET	319	27.101	34.078	77.686	1.00
	ATOM 22.04	884	O	MET	319	27.637	34.830	78.490	1.00
	ATOM 22.41	885	N	GLU	320	27.775	33.343	76.825	1.00
15	ATOM 23.90	887	CA	GLU	320	29.220	33.251	76.844	1.00
	ATOM 27.88	888	CB	GLU	320	29.736	32.360	75.714	1.00
20	ATOM 36.74	889	CG	GLU	320	31.143	31.847	75.990	1.00
	ATOM 43.00	890	CD	GLU	320	31.169	30.929	77.210	1.00
	ATOM 46.34	891	OE1	GLU	320	30.333	29.992	77.268	1.00
25	ATOM 46.76	892	OE2	GLU	320	32.004	31.132	78.135	1.00
	ATOM 22.26	893	C	GLU	320	30.042	34.514	76.872	1.00
30	ATOM 19.88	894	O	GLU	320	31.014	34.546	77.606	1.00
	ATOM 21.61	895	N	ASN	321	29.643	35.531	76.115	1.00
	ATOM 20.96	897	CA	ASN	321	30.434	36.739	76.062	1.00
35	ATOM 22.07	898	CB	ASN	321	30.647	37.164	74.591	1.00
	ATOM 22.87	899	CG	ASN	321	31.705	36.304	73.903	1.00
40	ATOM 24.57	900	OD1	ASN	321	31.523	35.816	72.784	1.00
	ATOM 19.26	901	ND2	ASN	321	32.796	36.080	74.608	1.00
	ATOM 18.96	904	C	ASN	321	30.012	37.866	76.966	1.00
45	ATOM 20.52	905	O	ASN	321	30.377	39.016	76.738	1.00
	ATOM 16.99	906	N	GLY	322	29.231	37.519	77.975	1.00
50	ATOM 16.93	908	CA	GLY	322	28.769	38.471	78.979	1.00
	ATOM 14.71	909	C	GLY	322	28.044	39.711	78.495	1.00
	ATOM 15.91	910	O	GLY	322	27.388	39.631	77.460	1.00
55	ATOM 12.37	911	N	SER	323	28.327	40.851	79.105	0.43
	ATOM 11.44	913	CA	SER	323	27.646	42.064	78.698	0.43



	ATOM 12.56	914	CB	SER	323	27.596	43.084	79.841	0.43
	ATOM 22.42	915	OG	SER	323	28.794	43.830	79.919	0.43
5	ATOM 9.75	917	C	SER	323	28.189	42.694	77.472	0.43
	ATOM 7.93	918	O	SER	323	29.388	42.697	77.253	0.43
10	ATOM 12.31	919	N	LEU	324	27.272	43.230	76.680	1.00
	ATOM 13.53	921	CA	LEU	324	27.636	43.886	75.441	1.00
	ATOM 11.33	922	CB	LEU	324	26.431	44.378	74.643	1.00
15	ATOM 11.74	923	CG	LEU	324	26.783	45.050	73.315	1.00
	ATOM 11.30	924	CD1	LEU	324	27.129	44.114	72.137	1.00
20	ATOM 13.50	925	CD2	LEU	324	25.487	45.831	72.929	1.00
	ATOM 14.72	926	C	LEU	324	28.560	45.053	75.824	1.00
	ATOM 15.57	927	O	LEU	324	29.626	45.171	75.249	1.00
25	ATOM 14.93	928	N	VAL	325	28.226	45.764	76.882	1.00
	ATOM 16.29	930	CA	VAL	325	29.051	46.873	77.264	1.00
30	ATOM 13.59	931	CB	VAL	325	28.448	47.689	78.401	1.00
	ATOM 14.56	932	CG1	VAL	325	28.612	47.004	79.724	1.00
	ATOM 15.75	933	CG2	VAL	325	29.095	49.059	78.404	1.00
35	ATOM 19.59	934	C	VAL	325	30.488	46.427	77.590	1.00
	ATOM 19.46	935	O	VAL	325	31.457	47.137	77.313	1.00
40	ATOM 18.89	936	N	ASP	326	30.635	45.209	78.126	1.00
	ATOM 16.74	938	CA	ASP	326	31.969	44.711	78.426	1.00
	ATOM 15.36	939	CB	ASP	326	31.937	43.714	79.539	1.00
45	ATOM 18.53	940	CG	ASP	326	31.595	44.321	80.855	1.00
	ATOM 22.26	941	OD1	ASP	326	31.915	45.501	81.089	1.00
50	ATOM 21.60	942	OD2	ASP	326	31.004	43.623	81.697	1.00
	ATOM 17.28	943	C	ASP	326	32.603	44.066	77.218	1.00
	ATOM 19.53	944	O	ASP	326	33.792	44.270	76.924	1.00
55	ATOM 16.77	945	N	PHE	327	31.807	43.309	76.487	1.00
	ATOM 15.42	947	CA	PHE	327	32.300	42.609	75.305	1.00

	ATOM 16.38	948	CB	PHE	327	31.167	41.806	74.651	1.00
	ATOM 18.43	949	CG	PHE	327	31.582	41.145	73.377	1.00
5	ATOM 17.80	950	CD1	PHE	327	32.504	40.079	73.406	1.00
	ATOM 19.13	951	CD2	PHE	327	31.133	41.595	72.172	1.00
10	ATOM 17.90	952	CE1	PHE	327	32.956	39.501	72.254	1.00
	ATOM 18.88	953	CE2	PHE	327	31.575	41.019	70.983	1.00
	ATOM 20.02	954	CZ	PHE	327	32.491	39.971	71.022	1.00
15	ATOM 14.46	955	C	PHE	327	32.925	43.534	74.257	1.00
	ATOM 15.79	956	O	PHE	327	33.924	43.143	73.608	1.00
20	ATOM 10.06	957	N	LEU	328	32.331	44.711	74.078	0.40
	ATOM 7.95	959	CA	LEU	328	32.798	45.658	73.078	0.40
	ATOM 5.19	960	CB	LEU	328	31.793	46.801	72.949	0.40
25	ATOM 2.00	961	CG	LEU	328	30.499	46.422	72.223	0.40
	ATOM 2.00	962	CD1	LEU	328	29.622	47.623	72.147	0.40
30	ATOM 2.00	963	CD2	LEU	328	30.823	45.921	70.838	0.40
	ATOM 8.30	964	C	LEU	328	34.172	46.227	73.360	0.40
	ATOM 5.91	965	O	LEU	328	34.786	46.852	72.507	0.40
35	ATOM 13.67	966	N	LYS	329	34.650	46.004	74.569	1.00
	ATOM 17.41	968	CA	LYS	329	35.946	46.510	74.960	1.00
40	ATOM 14.37	969	CB	LYS	329	35.886	47.085	76.365	1.00
	ATOM 15.62	970	CG	LYS	329	34.906	48.185	76.494	1.00
	ATOM 16.67	971	CD	LYS	329	34.845	48.643	77.935	1.00
45	ATOM 17.36	972	CE	LYS	329	33.757	49.685	78.082	1.00
	ATOM 20.17	973	NZ	LYS	329	33.631	50.022	79.532	1.00
50	ATOM 20.20	977	C	LYS	329	37.026	45.430	74.893	1.00
	ATOM 25.35	978	O	LYS	329	38.195	45.707	75.091	1.00
	ATOM 18.94	979	N	THR	330	36.646	44.192	74.618	1.00
55	ATOM 14.51	981	CA	THR	330	37.630	43.131	74.547	1.00
	ATOM 11.78	982	CB	THR	330	36.957	41.722	74.733	1.00

	ATOM 14.69	983	OG1	THR	330	36.088	41.483	73.653	1.00
	ATOM 8.84	985	CG2	THR	330	36.167	41.654	76.008	1.00
5	ATOM 15.86	986	C	THR	330	38.279	43.175	73.184	1.00
	ATOM 20.22	987	O	THR	330	37.781	43.845	72.271	1.00
10	ATOM 15.75	988	N	PRO	331	39.413	42.461	73.015	1.00
	ATOM 11.93	989	CD	PRO	331	40.192	41.763	74.059	1.00
	ATOM 14.76	990	CA	PRO	331	40.109	42.429	71.725	1.00
15	ATOM 12.37	991	CB	PRO	331	41.241	41.424	71.979	1.00
	ATOM 11.73	992	CG	PRO	331	41.562	41.646	73.417	1.00
20	ATOM 16.66	993	C	PRO	331	39.166	41.993	70.607	1.00
	ATOM 18.42	994	O	PRO	331	39.208	42.526	69.507	1.00
	ATOM 19.45	995	N	SER	332	38.283	41.033	70.884	1.00
25	ATOM 21.00	997	CA	SER	332	37.333	40.590	69.866	1.00
	ATOM 24.09	998	CB	SER	332	36.594	39.321	70.309	1.00
30	ATOM 31.13	999	OG	SER	332	37.486	38.231	70.423	1.00
	ATOM 19.06	1001	C	SER	332	36.309	41.670	69.588	1.00
	ATOM 21.97	1002	O	SER	332	35.994	41.908	68.446	1.00
35	ATOM 20.79	1003	N	GLY	333	35.759	42.271	70.639	1.00
	ATOM 22.67	1005	CA	GLY	333	34.769	43.330	70.447	1.00
40	ATOM 22.18	1006	C	GLY	333	35.350	44.503	69.650	1.00
	ATOM 21.13	1007	O	GLY	333	34.730	44.985	68.705	1.00
	ATOM 22.89	1008	N	ILE	334	36.576	44.890	70.002	1.00
45	ATOM 23.12	1010	CA	ILE	334	37.236	46.007	69.329	1.00
	ATOM 23.80	1011	CB	ILE	334	38.631	46.354	69.928	1.00
50	ATOM 25.22	1012	CG2	ILE	334	39.113	47.598	69.248	1.00
	ATOM 22.41	1013	CG1	ILE	334	38.582	46.603	71.458	1.00
	ATOM 21.59	1014	CD1	ILE	334	39.990	46.590	72.189	1.00
55	ATOM 23.63	1015	C	ILE	334	37.407	45.787	67.815	1.00
	ATOM 24.35	1016	O	ILE	334	37.290	46.710	67.047	1.00

	ATOM 26.06	1017	N	LYS	335	37.648	44.555	67.381	1.00
	ATOM 27.33	1019	CA	LYS	335	37.830	44.292	65.959	1.00
5	ATOM 30.12	1020	CB	LYS	335	38.616	43.001	65.763	1.00
	ATOM 36.81	1021	CG	LYS	335	40.007	43.052	66.331	1.00
10	ATOM 40.63	1022	CD	LYS	335	40.582	41.644	66.546	1.00
	ATOM 41.34	1023	CE	LYS	335	41.918	41.735	67.231	1.00
	ATOM 40.29	1024	NZ	LYS	335	42.211	40.491	67.953	1.00
15	ATOM 25.83	1028	C	LYS	335	36.558	44.225	65.137	1.00
	ATOM 24.93	1029	O	LYS	335	36.629	44.133	63.919	1.00
20	ATOM 25.22	1030	N	LEU	336	35.408	44.292	65.787	1.00
	ATOM 25.55	1032	CA	LEU	336	34.145	44.197	65.047	1.00
	ATOM 26.91	1033	CB	LEU	336	32.954	44.138	66.034	1.00
25	ATOM 25.49	1034	CG	LEU	336	32.907	42.865	66.938	1.00
	ATOM 28.40	1035	CD1	LEU	336	31.774	42.861	67.935	1.00
30	ATOM 22.50	1036	CD2	LEU	336	32.872	41.599	66.116	1.00
	ATOM 25.58	1037	C	LEU	336	33.971	45.282	63.993	1.00
	ATOM 28.02	1038	O	LEU	336	34.276	46.428	64.259	1.00
35	ATOM 25.27	1039	N	THR	337	33.495	44.910	62.802	1.00
	ATOM 25.86	1041	CA	THR	337	33.241	45.891	61.742	1.00
40	ATOM 25.88	1042	CB	THR	337	33.166	45.222	60.318	1.00
	ATOM 26.06	1043	OG1	THR	337	31.993	44.387	60.185	1.00
	ATOM 26.41	1045	CG2	THR	337	34.417	44.369	60.091	1.00
45	ATOM 25.21	1046	C	THR	337	31.935	46.648	62.062	1.00
	ATOM 24.24	1047	O	THR	337	31.162	46.183	62.910	1.00
50	ATOM 22.87	1048	N	ILE	338	31.728	47.795	61.416	1.00
	ATOM 23.64	1050	CA	ILE	338	30.489	48.561	61.632	1.00
	ATOM 20.07	1051	CB	ILE	338	30.484	49.881	60.824	1.00
55	ATOM 19.98	1052	CG2	ILE	338	30.632	49.557	59.351	1.00
	ATOM 19.49	1053	CG1	ILE	338	29.217	50.695	61.122	1.00

	ATOM 16.21	1054	CD1	ILE	338	29.044	51.055	62.619	1.00
	ATOM 22.37	1055	C	ILE	338	29.331	47.676	61.187	1.00
5	ATOM 25.54	1056	O	ILE	338	28.240	47.755	61.744	1.00
	ATOM 22.72	1057	N	ASN	339	29.605	46.806	60.223	1.00
10	ATOM 22.70	1059	CA	ASN	339	28.605	45.869	59.704	1.00
	ATOM 27.00	1060	CB	ASN	339	29.225	45.059	58.566	1.00
	ATOM 35.39	1061	CG	ASN	339	28.571	43.704	58.390	1.00
15	ATOM 38.99	1062	OD1	ASN	339	27.387	43.636	58.127	1.00
	ATOM 37.08	1063	ND2	ASN	339	29.346	42.623	58.527	1.00
20	ATOM 21.63	1066	C	ASN	339	28.060	44.948	60.802	1.00
	ATOM 20.41	1067	O	ASN	339	26.857	44.795	60.961	1.00
	ATOM 21.18	1068	N	LYS	340	28.961	44.369	61.595	1.00
25	ATOM 20.62	1070	CA	LYS	340	28.552	43.474	62.664	1.00
	ATOM 17.18	1071	CB	LYS	340	29.731	42.654	63.179	1.00
30	ATOM 17.20	1072	CG	LYS	340	29.389	41.735	64.356	1.00
	ATOM 17.23	1073	CD	LYS	340	28.338	40.693	63.958	1.00
	ATOM 19.05	1074	CE	LYS	340	27.957	39.875	65.176	1.00
35	ATOM 18.26	1075	NZ	LYS	340	26.872	38.871	64.846	1.00
	ATOM 20.56	1079	C	LYS	340	27.892	44.265	63.807	1.00
40	ATOM 19.99	1080	O	LYS	340	26.996	43.754	64.499	1.00
	ATOM 18.72	1081	N	LEU	341	28.372	45.485	64.038	1.00
	ATOM 18.01	1083	CA	LEU	341	27.760	46.309	65.067	1.00
45	ATOM 18.92	1084	CB	LEU	341	28.547	47.598	65.242	1.00
	ATOM 20.09	1085	CG	LEU	341	29.977	47.455	65.749	1.00
50	ATOM 19.43	1086	CD1	LEU	341	30.629	48.814	65.891	1.00
	ATOM 20.52	1087	CD2	LEU	341	29.977	46.775	67.103	1.00
	ATOM 17.59	1088	C	LEU	341	26.303	46.661	64.694	1.00
55	ATOM 18.31	1089	O	LEU	341	25.457	46.724	65.559	1.00
	ATOM 17.36	1090	N	LEU	342	26.044	46.864	63.411	1.00

	ATOM 18.37	1092	CA	LEU	342	24.716	47.210	62.932	1.00
	ATOM 16.74	1093	CB	LEU	342	24.805	47.753	61.496	1.00
5	ATOM 18.05	1094	CG	LEU	342	25.497	49.147	61.460	1.00
	ATOM 13.77	1095	CD1	LEU	342	25.819	49.476	60.011	1.00
10	ATOM 13.53	1096	CD2	LEU	342	24.607	50.233	62.125	1.00
	ATOM 18.66	1097	C	LEU	342	23.833	45.961	63.031	1.00
	ATOM 17.97	1098	O	LEU	342	22.634	46.049	63.299	1.00
15	ATOM 20.90	1099	N	ASP	343	24.491	44.816	62.914	1.00
	ATOM 20.25	1101	CA	ASP	343	23.867	43.494	63.017	1.00
20	ATOM 19.73	1102	CB	ASP	343	24.896	42.395	62.683	1.00
	ATOM 18.77	1103	CG	ASP	343	24.417	40.993	63.026	1.00
	ATOM 18.48	1104	OD1	ASP	343	23.220	40.755	63.221	1.00
25	ATOM 19.66	1105	OD2	ASP	343	25.268	40.100	63.076	1.00
	ATOM 17.56	1106	C	ASP	343	23.402	43.353	64.438	1.00
30	ATOM 17.02	1107	O	ASP	343	22.227	43.126	64.696	1.00
	ATOM 17.57	1108	N	MET	344	24.337	43.525	65.363	1.00
	ATOM 18.94	1110	CA	MET	344	23.940	43.438	66.754	1.00
35	ATOM 22.04	1111	CB	MET	344	25.159	43.614	67.636	1.00
	ATOM 20.27	1112	CG	MET	344	26.205	42.564	67.317	1.00
40	ATOM 25.96	1113	SD	MET	344	27.702	42.778	68.340	1.00
	ATOM 22.39	1114	CE	MET	344	27.750	41.447	69.307	1.00
	ATOM 16.14	1115	C	MET	344	22.832	44.414	67.132	1.00
45	ATOM 16.41	1116	O	MET	344	21.929	44.037	67.828	1.00
	ATOM 16.35	1117	N	ALA	345	22.904	45.652	66.647	1.00
50	ATOM 16.04	1119	CA	ALA	345	21.848	46.656	66.952	1.00
	ATOM 15.38	1120	CB	ALA	345	22.196	48.009	66.306	1.00
	ATOM 12.30	1121	C	ALA	345	20.475	46.163	66.481	1.00
55	ATOM 13.10	1122	O	ALA	345	19.496	46.319	67.209	1.00
	ATOM 12.19	1123	N	ALA	346	20.414	45.615	65.273	1.00

	ATOM 15.73	1125	CA	ALA	346	19.153	45.072	64.749	1.00
	ATOM 14.07	1126	CB	ALA	346	19.336	44.622	63.306	1.00
5	ATOM 17.64	1127	C	ALA	346	18.625	43.928	65.615	1.00
	ATOM 21.71	1128	O	ALA	346	17.436	43.843	65.851	1.00
10	ATOM 18.84	1129	N	GLN	347	19.527	43.064	66.118	1.00
	ATOM 17.03	1131	CA	GLN	347	19.121	41.930	66.947	1.00
	ATOM 13.90	1132	CB	GLN	347	20.318	41.035	67.320	1.00
15	ATOM 17.33	1133	CG	GLN	347	21.028	40.452	66.101	1.00
	ATOM 15.74	1134	CD	GLN	347	22.086	39.395	66.450	1.00
20	ATOM 13.53	1135	OE1	GLN	347	22.058	38.793	67.527	1.00
	ATOM 13.32	1136	NE2	GLN	347	23.009	39.142	65.508	1.00
	ATOM 17.85	1139	C	GLN	347	18.461	42.434	68.214	1.00
25	ATOM 18.87	1140	O	GLN	347	17.469	41.872	68.650	1.00
	ATOM 17.10	1141	N	ILE	348	19.026	43.474	68.796	1.00
30	ATOM 17.32	1143	CA	ILE	348	18.501	44.082	70.018	1.00
	ATOM 16.99	1144	CB	ILE	348	19.469	45.204	70.508	1.00
	ATOM 12.02	1145	CG2	ILE	348	18.892	45.990	71.694	1.00
35	ATOM 17.04	1146	CG1	ILE	348	20.791	44.532	70.895	1.00
	ATOM 15.48	1147	CD1	ILE	348	21.913	45.483	71.171	1.00
40	ATOM 16.91	1148	C	ILE	348	17.142	44.691	69.701	1.00
	ATOM 16.81	1149	O	ILE	348	16.212	44.525	70.447	1.00
	ATOM 16.01	1150	N	ALA	349	17.071	45.393	68.584	1.00
45	ATOM 15.43	1152	CA	ALA	349	15.852	46.024	68.152	1.00
	ATOM 9.59	1153	CB	ALA	349	16.080	46.841	66.879	1.00
50	ATOM 15.31	1154	C	ALA	349	14.772	44.936	67.910	1.00
	ATOM 13.86	1155	O	ALA	349	13.602	45.173	68.183	1.00
	ATOM 15.50	1156	N	GLU	350	15.174	43.746	67.460	1.00
55	ATOM 16.08	1158	CA	GLU	350	14.238	42.630	67.221	1.00
	ATOM 17.84	1159	CB	GLU	350	14.964	41.524	66.455	1.00

	ATOM	1160	CG	GLU	350	14.132	40.344	66.101	1.00
	21.98								
	ATOM	1161	CD	GLU	350	14.942	39.274	65.337	1.00
	26.03								
5	ATOM	1162	OE1	GLU	350	15.942	39.592	64.646	1.00
	25.60								
	ATOM	1163	OE2	GLU	350	14.546	38.095	65.408	1.00
	29.09								
10	ATOM	1164	C	GLU	350	13.695	42.103	68.531	1.00
	15.26								
	ATOM	1165	O	GLU	350	12.516	41.770	68.622	1.00
	13.24								
	ATOM	1166	N	GLY	351	14.574	41.999	69.540	1.00
	14.92								
15	ATOM	1168	CA	GLY	351	14.124	41.554	70.855	1.00
	15.10								
	ATOM	1169	C	GLY	351	13.134	42.578	71.418	1.00
	17.07								
	ATOM	1170	O	GLY	351	12.089	42.209	71.970	1.00
20	19.38								
	ATOM	1171	N	MET	352	13.462	43.860	71.291	1.00
	16.33								
	ATOM	1173	CA	MET	352	12.575	44.898	71.824	1.00
	14.83								
25	ATOM	1174	CB	MET	352	13.274	46.268	71.799	1.00
	17.15								
	ATOM	1175	CG	MET	352	14.404	46.402	72.806	1.00
	12.62								
30	ATOM	1176	SD	MET	352	13.996	46.063	74.508	1.00
	15.26								
	ATOM	1177	CE	MET	352	12.540	47.225	74.678	1.00
	13.35								
	ATOM	1178	C	MET	352	11.256	44.956	71.072	1.00
	13.44								
35	ATOM	1179	O	MET	352	10.261	45.337	71.647	1.00
	14.17								
	ATOM	1180	N	ALA	353	11.240	44.567	69.790	1.00
	11.98								
40	ATOM	1182	CA	ALA	353	10.001	44.558	69.022	1.00
	11.64								
	ATOM	1183	CB	ALA	353	10.267	44.268	67.587	1.00
	10.76								
	ATOM	1184	C	ALA	353	9.076	43.504	69.584	1.00
	15.00								
45	ATOM	1185	O	ALA	353	7.852	43.658	69.546	1.00
	17.11								
	ATOM	1186	N	PHE	354	9.672	42.420	70.085	1.00
	17.52								
50	ATOM	1188	CA	PHE	354	8.931	41.346	70.696	1.00
	15.71								
	ATOM	1189	CB	PHE	354	9.852	40.157	71.024	1.00
	16.79								
	ATOM	1190	CG	PHE	354	9.167	39.089	71.803	1.00
	15.49								
55	ATOM	1191	CD1	PHE	354	8.110	38.438	71.216	1.00
	16.89								
	ATOM	1192	CD2	PHE	354	9.468	38.821	73.124	1.00
	14.96								



	ATOM	1193	CE1	PHE	354	7.334	37.548	71.915	1.00
	15.69								
	ATOM	1194	CE2	PHE	354	8.687	37.907	73.856	1.00
	16.25								
5	ATOM	1195	CZ	PHE	354	7.613	37.279	73.233	1.00
	14.21								
	ATOM	1196	C	PHE	354	8.295	41.890	71.973	1.00
	14.98								
10	ATOM	1197	O	PHE	354	7.097	41.709	72.180	1.00
	15.65								
	ATOM	1198	N	ILE	355	9.100	42.516	72.831	1.00
	13.91								
	ATOM	1200	CA	ILE	355	8.610	43.093	74.083	1.00
	15.69								
15	ATOM	1201	CB	ILE	355	9.780	43.731	74.800	1.00
	14.98								
	ATOM	1202	CG2	ILE	355	9.306	44.671	75.941	1.00
	15.02								
	ATOM	1203	CG1	ILE	355	10.713	42.635	75.290	1.00
20	13.68								
	ATOM	1204	CD1	ILE	355	11.981	43.106	76.050	1.00
	13.62								
	ATOM	1205	C	ILE	355	7.459	44.101	73.798	1.00
	15.54								
25	ATOM	1206	O	ILE	355	6.414	44.063	74.408	1.00
	15.57								
	ATOM	1207	N	GLU	356	7.645	44.880	72.751	1.00
	16.21								
	ATOM	1209	CA	GLU	356	6.691	45.881	72.326	1.00
30	17.55								
	ATOM	1210	CB	GLU	356	7.289	46.645	71.150	1.00
	17.46								
	ATOM	1211	CG	GLU	356	6.388	47.565	70.371	1.00
	20.93								
35	ATOM	1212	CD	GLU	356	7.166	48.283	69.248	1.00
	25.88								
	ATOM	1213	OE1	GLU	356	7.312	47.785	68.095	1.00
	26.40								
	ATOM	1214	OE2	GLU	356	7.667	49.364	69.519	1.00
40	28.48								
	ATOM	1215	C	GLU	356	5.356	45.242	71.936	1.00
	17.60								
	ATOM	1216	O	GLU	356	4.325	45.698	72.383	1.00
	19.61								
45	ATOM	1217	N	GLU	357	5.415	44.192	71.118	0.36
	14.79								
	ATOM	1219	CA	GLU	357	4.242	43.456	70.661	0.36
	12.79								
	ATOM	1220	CB	GLU	357	4.727	42.434	69.605	0.36
50	12.71								
	ATOM	1221	CG	GLU	357	3.842	41.280	69.204	0.36
	16.32								
	ATOM	1222	CD	GLU	357	4.647	40.034	68.710	0.36
	21.70								
55	ATOM	1223	OE1	GLU	357	5.869	40.104	68.400	0.36
	23.32								
	ATOM	1224	OE2	GLU	357	4.033	38.948	68.665	0.36
	25.20								

	ATOM 10.96	1225	C	GLU	357	3.470	42.803	71.823	0.36
	ATOM 8.17	1226	O	GLU	357	2.255	42.749	71.813	0.36
5	ATOM 14.43	1227	N	ARG	358	4.174	42.404	72.866	1.00
	ATOM 14.57	1229	CA	ARG	358	3.531	41.750	74.016	1.00
10	ATOM 15.08	1230	CB	ARG	358	4.523	40.756	74.676	1.00
	ATOM 15.68	1231	CG	ARG	358	5.074	39.682	73.719	1.00
	ATOM 16.35	1232	CD	ARG	358	3.940	38.859	73.095	1.00
15	ATOM 20.96	1233	NE	ARG	358	2.986	38.399	74.097	1.00
	ATOM 22.73	1235	CZ	ARG	358	1.710	38.155	73.826	1.00
20	ATOM 19.50	1236	NH1	ARG	358	1.270	38.313	72.594	1.00
	ATOM 25.50	1239	NH2	ARG	358	0.860	37.789	74.773	1.00
	ATOM 14.70	1242	C	ARG	358	3.005	42.728	75.054	1.00
25	ATOM 16.87	1243	O	ARG	358	2.633	42.324	76.146	1.00
	ATOM 16.35	1244	N	ASN	359	3.036	44.025	74.755	1.00
30	ATOM 16.01	1246	CA	ASN	359	2.580	45.025	75.741	1.00
	ATOM 17.72	1247	CB	ASN	359	1.121	44.772	76.134	1.00
	ATOM 20.99	1248	CG	ASN	359	0.162	45.263	75.077	1.00
35	ATOM 23.16	1249	OD1	ASN	359	0.591	45.886	74.139	1.00
	ATOM 23.65	1250	ND2	ASN	359	-1.126	44.936	75.193	1.00
40	ATOM 16.43	1253	C	ASN	359	3.441	45.185	76.985	1.00
	ATOM 17.27	1254	O	ASN	359	2.945	45.523	78.062	1.00
	ATOM 17.35	1255	N	TYR	360	4.731	44.912	76.859	1.00
45	ATOM 18.37	1257	CA	TYR	360	5.618	45.104	78.010	1.00
	ATOM 17.76	1258	CB	TYR	360	6.487	43.865	78.282	1.00
50	ATOM 16.41	1259	CG	TYR	360	5.782	42.747	78.996	1.00
	ATOM 18.58	1260	CD1	TYR	360	4.982	41.863	78.290	1.00
	ATOM 20.66	1261	CE1	TYR	360	4.323	40.835	78.945	1.00
55	ATOM 17.13	1262	CD2	TYR	360	5.910	42.581	80.355	1.00
	ATOM 20.21	1263	CE2	TYR	360	5.253	41.560	81.023	1.00

	ATOM	1264	CZ	TYR	360	4.463	40.700	80.314	1.00
	19.85								
	ATOM	1265	OH	TYR	360	3.743	39.736	80.985	1.00
	26.09								
5	ATOM	1267	C	TYR	360	6.572	46.266	77.723	1.00
	17.97								
	ATOM	1268	O	TYR	360	6.696	46.727	76.596	1.00
	14.07								
10	ATOM	1269	N	ILE	361	7.198	46.752	78.782	1.00
	18.53								
	ATOM	1271	CA	ILE	361	8.219	47.755	78.665	1.00
	20.70								
	ATOM	1272	CB	ILE	361	7.779	49.180	79.175	1.00
	20.42								
15	ATOM	1273	CG2	ILE	361	6.761	49.799	78.224	1.00
	20.38								
	ATOM	1274	CG1	ILE	361	7.310	49.121	80.610	1.00
	20.54								
20	ATOM	1275	CD1	ILE	361	7.026	50.483	81.187	1.00
	24.78								
	ATOM	1276	C	ILE	361	9.382	47.205	79.488	1.00
	21.11								
	ATOM	1277	O	ILE	361	9.184	46.410	80.408	1.00
	23.36								
25	ATOM	1278	N	HIS	362	10.587	47.659	79.183	1.00
	20.32								
	ATOM	1280	CA	HIS	362	11.778	47.195	79.900	1.00
	18.13								
30	ATOM	1281	CB	HIS	362	12.876	46.935	78.865	1.00
	17.63								
	ATOM	1282	CG	HIS	362	14.083	46.232	79.419	1.00
	18.12								
	ATOM	1283	CD2	HIS	362	14.479	44.945	79.323	1.00
	18.04								
35	ATOM	1284	ND1	HIS	362	15.052	46.880	80.162	1.00
	17.47								
	ATOM	1286	CE1	HIS	362	15.995	46.017	80.494	1.00
	19.69								
40	ATOM	1287	NE2	HIS	362	15.669	44.837	80.002	1.00
	19.55								
	ATOM	1289	C	HIS	362	12.250	48.182	80.953	1.00
	16.38								
	ATOM	1290	O	HIS	362	12.533	47.820	82.077	1.00
	16.56								
45	ATOM	1291	N	ARG	363	12.384	49.442	80.541	1.00
	18.77								
	ATOM	1293	CA	ARG	363	12.795	50.537	81.437	1.00
	19.55								
50	ATOM	1294	CB	ARG	363	11.940	50.584	82.703	1.00
	16.82								
	ATOM	1295	CG	ARG	363	10.450	50.871	82.432	1.00
	15.69								
	ATOM	1296	CD	ARG	363	9.746	51.332	83.693	1.00
	12.82								
55	ATOM	1297	NE	ARG	363	9.807	50.377	84.769	1.00
	16.17								
	ATOM	1299	CZ	ARG	363	9.719	50.708	86.044	1.00
	16.47								

	ATOM	1300	NH1	ARG	363	9.575	51.976	86.373	1.00
	21.41								
	ATOM	1303	NH2	ARG	363	9.731	49.787	86.988	1.00
	19.50								
5	ATOM	1306	C	ARG	363	14.258	50.557	81.853	1.00
	20.13								
	ATOM	1307	O	ARG	363	14.649	51.438	82.576	1.00
	23.91								
10	ATOM	1308	N	ASP	364	15.058	49.579	81.441	1.00
	19.03								
	ATOM	1310	CA	ASP	364	16.485	49.567	81.836	1.00
	16.53								
	ATOM	1311	CB	ASP	364	16.697	48.592	82.978	1.00
	19.77								
15	ATOM	1312	CG	ASP	364	17.928	48.901	83.840	1.00
	23.49								
	ATOM	1313	OD1	ASP	364	18.660	49.876	83.582	1.00
	24.42								
20	ATOM	1314	OD2	ASP	364	18.153	48.176	84.825	1.00
	27.26								
	ATOM	1315	C	ASP	364	17.296	49.147	80.620	1.00
	16.47								
	ATOM	1316	O	ASP	364	18.284	48.424	80.741	1.00
	17.58								
25	ATOM	1317	N	LEU	365	16.851	49.560	79.447	1.00
	12.32								
	ATOM	1319	CA	LEU	365	17.519	49.247	78.203	1.00
	14.67								
30	ATOM	1320	CB	LEU	365	16.595	49.479	77.026	1.00
	12.87								
	ATOM	1321	CG	LEU	365	17.089	49.116	75.630	1.00
	11.40								
	ATOM	1322	CD1	LEU	365	17.468	47.618	75.584	1.00
	14.03								
35	ATOM	1323	CD2	LEU	365	16.067	49.428	74.583	1.00
	7.20								
	ATOM	1324	C	LEU	365	18.831	50.090	78.034	1.00
	19.62								
40	ATOM	1325	O	LEU	365	18.811	51.329	77.861	1.00
	21.35								
	ATOM	1326	N	ARG	366	19.948	49.382	78.017	1.00
	18.38								
	ATOM	1328	CA	ARG	366	21.273	49.955	77.887	1.00
	18.62								
45	ATOM	1329	CB	ARG	366	21.668	50.625	79.207	1.00
	17.23								
	ATOM	1330	CG	ARG	366	21.584	49.703	80.386	1.00
	21.00								
50	ATOM	1331	CD	ARG	366	21.786	50.457	81.719	1.00
	23.24								
	ATOM	1332	NE	ARG	366	23.106	51.061	81.783	1.00
	29.88								
	ATOM	1334	CZ	ARG	366	23.437	52.001	82.672	1.00
	35.16								
55	ATOM	1335	NH1	ARG	366	22.541	52.419	83.566	1.00
	34.83								
	ATOM	1338	NH2	ARG	366	24.663	52.527	82.653	1.00
	35.29								

	ATOM	1341	C	ARG	366	22.244	48.773	77.568	1.00
	19.27								
	ATOM	1342	O	ARG	366	21.917	47.574	77.794	1.00
	18.61								
5	ATOM	1343	N	ALA	367	23.420	49.085	77.066	1.00
	17.16								
	ATOM	1345	CA	ALA	367	24.361	48.059	76.699	1.00
	14.91								
10	ATOM	1346	CB	ALA	367	25.589	48.643	76.078	1.00
	15.47								
	ATOM	1347	C	ALA	367	24.738	47.110	77.830	1.00
	15.64								
	ATOM	1348	O	ALA	367	25.034	45.945	77.562	1.00
	16.83								
15	ATOM	1349	N	ALA	368	24.702	47.574	79.072	1.00
	13.84								
	ATOM	1351	CA	ALA	368	25.020	46.728	80.192	1.00
	14.87								
	ATOM	1352	CB	ALA	368	25.095	47.516	81.477	1.00
	12.42								
20	ATOM	1353	C	ALA	368	23.978	45.603	80.353	1.00
	18.21								
	ATOM	1354	O	ALA	368	24.299	44.532	80.936	1.00
	19.57								
25	ATOM	1355	N	ASN	369	22.773	45.840	79.835	1.00
	16.57								
	ATOM	1357	CA	ASN	369	21.707	44.868	79.962	1.00
	17.13								
	ATOM	1358	CB	ASN	369	20.457	45.543	80.521	1.00
	17.43								
30	ATOM	1359	CG	ASN	369	20.656	45.924	81.965	1.00
	18.16								
	ATOM	1360	OD1	ASN	369	21.446	45.275	82.672	1.00
	18.99								
35	ATOM	1361	ND2	ASN	369	19.982	46.986	82.416	1.00
	20.31								
	ATOM	1364	C	ASN	369	21.429	44.042	78.706	1.00
	17.54								
	ATOM	1365	O	ASN	369	20.324	43.535	78.510	1.00
	20.01								
40	ATOM	1366	N	ILE	370	22.392	44.022	77.805	1.00
	16.12								
	ATOM	1368	CA	ILE	370	22.285	43.213	76.621	1.00
	15.43								
45	ATOM	1369	CB	ILE	370	22.616	43.996	75.347	1.00
	13.08								
	ATOM	1370	CG2	ILE	370	22.685	43.061	74.163	1.00
	12.36								
	ATOM	1371	CG1	ILE	370	21.605	45.120	75.127	1.00
	14.37								
50	ATOM	1372	CD1	ILE	370	20.119	44.695	75.114	1.00
	15.62								
	ATOM	1373	C	ILE	370	23.389	42.142	76.825	1.00
	16.79								
55	ATOM	1374	O	ILE	370	24.515	42.470	77.255	1.00
	17.04								
	ATOM	1375	N	LEU	371	23.062	40.857	76.617	1.00
	16.45								

	ATOM 13.91	1377	CA	LEU	371	24.086	39.814	76.783	1.00
	ATOM 11.51	1378	CB	LEU	371	23.629	38.718	77.718	1.00
5	ATOM 11.65	1379	CG	LEU	371	23.385	39.151	79.162	1.00
	ATOM 9.30	1380	CD1	LEU	371	23.017	37.974	80.030	1.00
10	ATOM 13.96	1381	CD2	LEU	371	24.623	39.845	79.736	1.00
	ATOM 15.55	1382	C	LEU	371	24.515	39.273	75.435	1.00
	ATOM 14.88	1383	O	LEU	371	23.743	39.310	74.498	1.00
15	ATOM 16.05	1384	N	VAL	372	25.753	38.805	75.323	1.00
	ATOM 16.97	1386	CA	VAL	372	26.276	38.352	74.048	1.00
20	ATOM 15.86	1387	CB	VAL	372	27.483	39.238	73.661	1.00
	ATOM 14.22	1388	CG1	VAL	372	28.019	38.915	72.278	1.00
	ATOM 16.22	1389	CG2	VAL	372	27.015	40.717	73.765	1.00
25	ATOM 19.00	1390	C	VAL	372	26.662	36.860	74.136	1.00
	ATOM 16.67	1391	O	VAL	372	27.310	36.425	75.091	1.00
30	ATOM 17.20	1392	N	SER	373	26.176	36.084	73.171	1.00
	ATOM 16.49	1394	CA	SER	373	26.443	34.661	73.173	1.00
	ATOM 9.61	1395	CB	SER	373	25.401	33.903	72.382	1.00
35	ATOM 12.51	1396	OG	SER	373	25.609	34.133	71.002	1.00
	ATOM 19.20	1398	C	SER	373	27.818	34.328	72.567	1.00
40	ATOM 18.05	1399	O	SER	373	28.515	35.194	71.993	1.00
	ATOM 19.95	1400	N	ASP	374	28.132	33.030	72.589	1.00
	ATOM 20.00	1402	CA	ASP	374	29.372	32.544	72.033	1.00
45	ATOM 26.17	1403	CB	ASP	374	29.589	31.078	72.391	1.00
	ATOM 31.48	1404	CG	ASP	374	28.545	30.163	71.772	1.00
	ATOM 38.05	1405	OD1	ASP	374	27.331	30.389	71.978	1.00
50	ATOM 34.24	1406	OD2	ASP	374	28.943	29.237	71.042	1.00
	ATOM 20.11	1407	C	ASP	374	29.393	32.722	70.530	1.00
55	ATOM 20.54	1408	O	ASP	374	30.473	32.770	69.956	1.00
	ATOM 19.69	1409	N	THR	375	28.233	32.821	69.871	1.00

5	ATOM 19.16	1411	CA	THR	375	28.237	33.030	68.402	1.00
	ATOM 18.19	1412	CB	THR	375	27.161	32.200	67.721	1.00
	ATOM 21.03	1413	OG1	THR	375	25.884	32.473	68.337	1.00
	ATOM 22.62	1415	CG2	THR	375	27.480	30.704	67.854	1.00
10	ATOM 18.52	1416	C	THR	375	28.050	34.530	68.047	1.00
	ATOM 16.67	1417	O	THR	375	27.761	34.892	66.912	1.00
	ATOM 17.98	1418	N	LEU	376	28.207	35.375	69.055	1.00
	ATOM 19.87	1420	CA	LEU	376	28.055	36.815	68.877	1.00
20	ATOM 16.55	1421	CB	LEU	376	29.050	37.365	67.846	1.00
	ATOM 19.39	1422	CG	LEU	376	30.530	37.043	68.128	1.00
	ATOM 17.27	1423	CD1	LEU	376	31.407	38.002	67.298	1.00
	ATOM 18.10	1424	CD2	LEU	376	30.879	37.163	69.594	1.00
25	ATOM 19.40	1425	C	LEU	376	26.628	37.226	68.523	1.00
	ATOM 20.81	1426	O	LEU	376	26.403	38.075	67.668	1.00
	ATOM 17.62	1427	N	SER	377	25.674	36.563	69.154	1.00
	ATOM 16.30	1429	CA	SER	377	24.280	36.930	68.974	1.00
35	ATOM 10.40	1430	CB	SER	377	23.370	35.697	68.723	1.00
	ATOM 11.26	1431	OG	SER	377	23.443	34.763	69.780	1.00
	ATOM 16.38	1433	C	SER	377	23.928	37.681	70.273	1.00
	ATOM 14.77	1434	O	SER	377	24.550	37.456	71.330	1.00
40	ATOM 16.82	1435	N	CYS	378	22.993	38.632	70.165	1.00
	ATOM 17.69	1437	CA	CYS	378	22.615	39.439	71.319	1.00
	ATOM 18.25	1438	CB	CYS	378	22.723	40.941	70.982	1.00
	ATOM 15.71	1439	SG	CYS	378	24.427	41.428	70.519	1.00
50	ATOM 15.25	1440	C	CYS	378	21.252	39.151	71.879	1.00
	ATOM 15.90	1441	O	CYS	378	20.327	38.899	71.148	1.00
	ATOM 15.87	1442	N	LYS	379	21.130	39.258	73.195	1.00
	ATOM 15.83	1444	CA	LYS	379	19.873	39.054	73.836	1.00
55	ATOM 15.60	1445	CB	LYS	379	19.812	37.666	74.496	1.00

	ATOM	1446	CG	LYS	379	20.037	36.561	73.480	1.00
	19.59								
	ATOM	1447	CD	LYS	379	19.703	35.184	74.000	1.00
	16.05								
5	ATOM	1448	CE	LYS	379	20.029	34.207	72.859	1.00
	16.48								
	ATOM	1449	NZ	LYS	379	19.249	32.982	72.931	1.00
	14.49								
10	ATOM	1453	C	LYS	379	19.584	40.120	74.910	1.00
	15.54								
	ATOM	1454	O	LYS	379	20.485	40.554	75.630	1.00
	14.31								
	ATOM	1455	N	ILE	380	18.295	40.466	75.022	1.00
	14.13								
15	ATOM	1457	CA	ILE	380	17.854	41.414	76.044	1.00
	11.75								
	ATOM	1458	CB	ILE	380	16.375	41.897	75.825	1.00
	14.77								
	ATOM	1459	CG2	ILE	380	16.038	43.003	76.826	1.00
20	12.38								
	ATOM	1460	CG1	ILE	380	16.131	42.369	74.372	1.00
	12.86								
	ATOM	1461	CD1	ILE	380	17.049	43.459	73.920	1.00
	15.77								
25	ATOM	1462	C	ILE	380	17.899	40.623	77.352	1.00
	12.43								
	ATOM	1463	O	ILE	380	17.428	39.476	77.425	1.00
	11.43								
	ATOM	1464	N	ALA	381	18.410	41.245	78.388	1.00
30	12.03								
	ATOM	1466	CA	ALA	381	18.540	40.652	79.684	1.00
	13.59								
	ATOM	1467	CB	ALA	381	19.984	40.229	79.914	1.00
	12.83								
35	ATOM	1468	C	ALA	381	18.103	41.691	80.759	1.00
	16.54								
	ATOM	1469	O	ALA	381	17.777	42.833	80.432	1.00
	17.99								
	ATOM	1470	N	ASP	382	18.145	41.285	82.023	1.00
40	17.83								
	ATOM	1472	CA	ASP	382	17.758	42.113	83.173	1.00
	22.61								
	ATOM	1473	CB	ASP	382	18.782	43.206	83.523	1.00
	24.19								
45	ATOM	1474	CG	ASP	382	18.593	43.704	84.956	1.00
	28.24								
	ATOM	1475	OD1	ASP	382	17.492	43.502	85.538	1.00
	29.43								
	ATOM	1476	OD2	ASP	382	19.545	44.237	85.533	1.00
50	33.21								
	ATOM	1477	C	ASP	382	16.346	42.720	83.100	1.00
	23.47								
	ATOM	1478	O	ASP	382	16.156	43.929	82.857	1.00
	26.04								
55	ATOM	1479	N	PHE	383	15.374	41.876	83.437	1.00
	20.99								
	ATOM	1481	CA	PHE	383	13.971	42.238	83.431	1.00
	17.65								



	ATOM	1482	CB	PHE	383	13.146	41.066	82.908	1.00
	15.74								
	ATOM	1483	CG	PHE	383	13.539	40.611	81.531	1.00
	11.79								
5	ATOM	1484	CD1	PHE	383	13.033	41.254	80.412	1.00
	10.41								
	ATOM	1485	CD2	PHE	383	14.474	39.598	81.355	1.00
	6.82								
10	ATOM	1486	CE1	PHE	383	13.449	40.906	79.140	1.00
	10.63								
	ATOM	1487	CE2	PHE	383	14.900	39.245	80.081	1.00
	7.13								
	ATOM	1488	CZ	PHE	383	14.401	39.887	78.985	1.00
	7.27								
15	ATOM	1489	C	PHE	383	13.441	42.694	84.793	1.00
	18.53								
	ATOM	1490	O	PHE	383	12.226	42.734	85.010	1.00
	18.76								
20	ATOM	1491	N	GLY	384	14.340	43.042	85.696	1.00
	19.19								
	ATOM	1493	CA	GLY	384	13.939	43.509	87.021	1.00
	21.04								
	ATOM	1494	C	GLY	384	12.973	44.703	87.032	1.00
	22.23								
25	ATOM	1495	O	GLY	384	12.091	44.791	87.890	1.00
	22.56								
	ATOM	1496	N	LEU	385	13.121	45.606	86.060	1.00
	21.19								
30	ATOM	1498	CA	LEU	385	12.234	46.774	86.004	1.00
	21.56								
	ATOM	1499	CB	LEU	385	13.032	48.048	85.706	1.00
	19.23								
	ATOM	1500	CG	LEU	385	13.985	48.510	86.806	1.00
	19.18								
35	ATOM	1501	CD1	LEU	385	14.780	49.751	86.306	1.00
	21.36								
	ATOM	1502	CD2	LEU	385	13.200	48.842	88.046	1.00
	14.38								
40	ATOM	1503	C	LEU	385	11.150	46.625	84.962	1.00
	20.62								
	ATOM	1504	O	LEU	385	10.322	47.522	84.802	1.00
	21.37								
	ATOM	1505	N	ALA	386	11.191	45.528	84.211	1.00
	21.92								
45	ATOM	1507	CA	ALA	386	10.208	45.302	83.150	1.00
	22.38								
	ATOM	1508	CB	ALA	386	10.536	44.062	82.366	1.00
	21.60								
50	ATOM	1509	C	ALA	386	8.781	45.234	83.718	1.00
	22.56								
	ATOM	1510	O	ALA	386	8.565	44.759	84.837	1.00
	22.02								
	ATOM	1511	N	ARG	387	7.815	45.709	82.937	1.00
	22.00								
55	ATOM	1513	CA	ARG	387	6.418	45.730	83.394	1.00
	21.42								
	ATOM	1514	CB	ARG	387	6.052	47.080	84.021	1.00
	20.93								

	ATOM	1515	CG	ARG	387	6.878	47.511	85.195	1.00
	22.36								
	ATOM	1516	CD	ARG	387	6.644	46.657	86.383	1.00
	20.81								
5	ATOM	1517	NE	ARG	387	7.346	47.194	87.533	1.00
	22.93								
	ATOM	1519	CZ	ARG	387	8.504	46.731	87.993	1.00
	26.61								
10	ATOM	1520	NH1	ARG	387	9.108	45.704	87.388	1.00
	26.75								
	ATOM	1523	NH2	ARG	387	9.044	47.253	89.088	1.00
	25.49								
	ATOM	1526	C	ARG	387	5.411	45.490	82.282	1.00
	20.65								
15	ATOM	1527	O	ARG	387	5.638	45.837	81.108	1.00
	15.93								
	ATOM	1528	N	LEU	388	4.299	44.859	82.655	1.00
	22.37								
20	ATOM	1530	CA	LEU	388	3.256	44.638	81.689	1.00
	25.26								
	ATOM	1531	CB	LEU	388	2.387	43.430	82.041	1.00
	27.00								
	ATOM	1532	CG	LEU	388	1.550	43.223	80.779	1.00
	25.08								
25	ATOM	1533	CD1	LEU	388	1.705	41.941	79.981	1.00
	26.36								
	ATOM	1534	CD2	LEU	388	0.247	43.295	81.355	1.00
	25.06								
30	ATOM	1535	C	LEU	388	2.457	45.939	81.683	1.00
	26.73								
	ATOM	1536	O	LEU	388	2.148	46.495	82.723	1.00
	25.72								
	ATOM	1537	N	ILE	389	2.160	46.425	80.496	1.00
	29.26								
35	ATOM	1539	CA	ILE	389	1.470	47.676	80.350	1.00
	34.27								
	ATOM	1540	CB	ILE	389	2.196	48.499	79.297	1.00
	35.09								
40	ATOM	1541	CG2	ILE	389	1.467	49.722	78.935	1.00
	36.03								
	ATOM	1542	CG1	ILE	389	3.563	48.869	79.864	1.00
	36.24								
	ATOM	1543	CD1	ILE	389	3.507	49.506	81.264	1.00
	33.80								
45	ATOM	1544	C	ILE	389	0.018	47.434	80.058	1.00
	37.44								
	ATOM	1545	O	ILE	389	-0.390	47.106	78.946	1.00
	38.29								
50	ATOM	1546	N	GLU	390	-0.765	47.653	81.088	1.00
	40.80								
	ATOM	1548	CA	GLU	390	-2.186	47.422	81.022	1.00
	46.41								
	ATOM	1549	CB	GLU	390	-2.712	47.356	82.459	1.00
	48.77								
55	ATOM	1550	CG	GLU	390	-1.681	46.711	83.434	1.00
	51.74								
	ATOM	1551	CD	GLU	390	-1.810	45.193	83.740	1.00
	55.50								

	ATOM	1552	OE1	GLU	390	-2.641	44.416	83.175	1.00
	57.31								
	ATOM	1553	OE2	GLU	390	-0.984	44.799	84.598	1.00
	56.71								
5	ATOM	1554	C	GLU	390	-2.896	48.444	80.068	1.00
	48.64								
	ATOM	1555	O	GLU	390	-3.560	48.015	79.119	1.00
	50.05								
10	ATOM	1556	N	ASP	391	-2.589	49.746	80.236	1.00
	49.94								
	ATOM	1558	CA	ASP	391	-3.062	50.943	79.463	1.00
	52.09								
	ATOM	1559	CB	ASP	391	-3.704	51.868	80.517	1.00
	53.43								
15	ATOM	1560	CG	ASP	391	-5.190	51.599	80.683	1.00
	54.64								
	ATOM	1561	OD1	ASP	391	-5.816	51.546	79.605	1.00
	57.00								
20	ATOM	1562	OD2	ASP	391	-5.720	51.446	81.813	1.00
	55.68								
	ATOM	1563	C	ASP	391	-1.720	51.530	78.813	1.00
	54.45								
	ATOM	1564	O	ASP	391	-0.734	50.989	79.216	1.00
	57.78								
25	ATOM	1565	N	ASN	392	-1.601	52.563	77.923	1.00
	54.74								
	ATOM	1567	CA	ASN	392	-0.222	53.004	77.344	1.00
	54.25								
30	ATOM	1568	CB	ASN	392	-0.281	54.412	76.624	1.00
	57.84								
	ATOM	1569	CG	ASN	392	0.774	54.671	75.390	1.00
	61.35								
	ATOM	1570	OD1	ASN	392	1.285	53.777	74.659	1.00
	63.64								
35	ATOM	1571	ND2	ASN	392	0.926	55.982	75.103	1.00
	64.17								
	ATOM	1574	C	ASN	392	0.909	53.201	78.360	1.00
	51.44								
40	ATOM	1575	O	ASN	392	2.071	53.027	78.005	1.00
	50.36								
	ATOM	1576	N	GLU	393	0.598	53.413	79.630	1.00
	48.28								
	ATOM	1578	CA	GLU	393	1.703	53.844	80.469	1.00
	46.79								
45	ATOM	1579	CB	GLU	393	1.505	55.343	80.475	1.00
	46.89								
	ATOM	1580	CG	GLU	393	2.546	56.345	80.691	1.00
	46.44								
50	ATOM	1581	CD	GLU	393	1.801	57.659	80.529	1.00
	46.39								
	ATOM	1582	OE1	GLU	393	1.063	58.050	81.476	1.00
	45.21								
	ATOM	1583	OE2	GLU	393	1.773	58.175	79.384	1.00
	45.38								
55	ATOM	1584	C	GLU	393	1.852	53.352	81.891	1.00
	46.03								
	ATOM	1585	O	GLU	393	0.867	53.073	82.583	1.00
	47.03								

	ATOM 43.40	1586	N	TYR	394	3.106	53.298	82.336	1.00
	ATOM 40.15	1588	CA	TYR	394	3.368	52.883	83.697	1.00
5	ATOM 38.62	1589	CB	TYR	394	4.177	51.595	83.765	1.00
	ATOM 38.07	1590	CG	TYR	394	4.416	51.044	85.153	1.00
10	ATOM 39.62	1591	CD1	TYR	394	5.245	51.714	86.025	1.00
	ATOM 42.24	1592	CE1	TYR	394	5.630	51.162	87.222	1.00
	ATOM 40.01	1593	CD2	TYR	394	3.946	49.783	85.532	1.00
15	ATOM 40.87	1594	CE2	TYR	394	4.328	49.204	86.751	1.00
	ATOM 43.04	1595	CZ	TYR	394	5.186	49.907	87.591	1.00
20	ATOM 46.90	1596	OH	TYR	394	5.669	49.391	88.778	1.00
	ATOM 40.06	1598	C	TYR	394	4.027	54.037	84.428	1.00
	ATOM 40.48	1599	O	TYR	394	5.016	54.637	83.968	1.00
25	ATOM 40.62	1600	N	THR	395	3.494	54.314	85.605	1.00
	ATOM 39.68	1602	CA	THR	395	3.996	55.420	86.394	1.00
30	ATOM 36.39	1603	CB	THR	395	2.833	56.407	86.622	1.00
	ATOM 35.31	1604	OG1	THR	395	2.416	56.900	85.345	1.00
	ATOM 34.94	1606	CG2	THR	395	3.269	57.568	87.421	1.00
35	ATOM 40.23	1607	C	THR	395	4.793	55.021	87.646	1.00
	ATOM 42.34	1608	O	THR	395	4.261	54.422	88.561	1.00
40	ATOM 40.72	1609	N	ALA	396	6.094	55.301	87.652	1.00
	ATOM 42.94	1611	CA	ALA	396	6.936	54.917	88.793	1.00
	ATOM 42.40	1612	CB	ALA	396	8.401	55.095	88.459	1.00
45	ATOM 45.64	1613	C	ALA	396	6.652	55.661	90.064	1.00
	ATOM 47.05	1614	O	ALA	396	5.918	56.635	90.044	1.00
50	ATOM 48.85	1615	N	ARG	397	7.312	55.274	91.152	1.00
	ATOM 52.23	1617	CA	ARG	397	7.118	55.986	92.409	1.00
	ATOM 51.92	1618	CB	ARG	397	7.631	55.177	93.578	1.00
55	ATOM 56.10	1619	CG	ARG	397	7.441	55.909	94.893	1.00
	ATOM 57.82	1620	CD	ARG	397	7.539	54.933	96.067	1.00

	ATOM	1621	NE	ARG	397	7.418	55.586	97.366	1.00
	56.39								
	ATOM	1623	CZ	ARG	397	6.985	54.972	98.459	1.00
	55.20								
5	ATOM	1624	NH1	ARG	397	6.624	53.694	98.400	1.00
	53.82								
	ATOM	1627	NH2	ARG	397	6.934	55.634	99.602	1.00
	55.03								
10	ATOM	1630	C	ARG	397	7.816	57.358	92.363	1.00
	54.99								
	ATOM	1631	O	ARG	397	8.851	57.505	91.714	1.00
	55.96								
	ATOM	1632	N	GLU	398	7.239	58.380	92.988	1.00
	56.91								
15	ATOM	1634	CA	GLU	398	7.884	59.688	92.932	1.00
	59.37								
	ATOM	1635	CB	GLU	398	7.106	60.765	93.703	1.00
	62.54								
20	ATOM	1636	CG	GLU	398	5.719	61.103	93.140	1.00
	66.92								
	ATOM	1637	CD	GLU	398	5.758	61.532	91.681	1.00
	70.31								
	ATOM	1638	OE1	GLU	398	6.843	61.954	91.212	1.00
	74.49								
25	ATOM	1639	OE2	GLU	398	4.703	61.414	91.022	1.00
	71.70								
	ATOM	1640	C	GLU	398	9.298	59.578	93.469	1.00
	59.04								
30	ATOM	1641	O	GLU	398	10.211	60.249	92.988	1.00
	58.64								
	ATOM	1642	N	GLY	399	9.482	58.692	94.444	1.00
	57.92								
	ATOM	1644	CA	GLY	399	10.799	58.527	95.010	1.00
	55.73								
35	ATOM	1645	C	GLY	399	11.724	57.759	94.081	1.00
	53.26								
	ATOM	1646	O	GLY	399	12.920	57.684	94.327	1.00
	54.49								
40	ATOM	1647	N	ALA	400	11.182	57.195	93.011	1.00
	50.53								
	ATOM	1649	CA	ALA	400	12.004	56.401	92.092	1.00
	49.36								
	ATOM	1650	CB	ALA	400	11.126	55.624	91.107	1.00
	47.55								
45	ATOM	1651	C	ALA	400	12.988	57.254	91.331	1.00
	48.46								
	ATOM	1652	O	ALA	400	12.627	58.312	90.838	1.00
	51.06								
50	ATOM	1653	N	ALA	401	14.170	56.724	91.100	1.00
	46.01								
	ATOM	1655	CA	ALA	401	15.170	57.496	90.478	1.00
	44.15								
	ATOM	1656	CB	ALA	401	16.096	57.908	91.591	1.00
	45.07								
55	ATOM	1657	C	ALA	401	15.864	56.589	89.359	1.00
	41.57								
	ATOM	1658	O	ALA	401	16.039	55.375	89.578	1.00
	40.99								

	ATOM 38.21	1659	N	PHE	402	16.052	57.085	88.130	1.00
	ATOM 35.49	1661	CA	PHE	402	16.627	56.248	87.072	1.00
5	ATOM 35.98	1662	CB	PHE	402	15.606	55.988	85.941	1.00
	ATOM 39.61	1663	CG	PHE	402	14.368	55.247	86.382	1.00
10	ATOM 40.06	1664	CD1	PHE	402	14.299	53.843	86.361	1.00
	ATOM 41.14	1665	CD2	PHE	402	13.289	55.959	86.919	1.00
	ATOM 40.16	1666	CE1	PHE	402	13.161	53.164	86.893	1.00
15	ATOM 40.96	1667	CE2	PHE	402	12.155	55.293	87.446	1.00
	ATOM 41.14	1668	CZ	PHE	402	12.098	53.899	87.436	1.00
20	ATOM 34.30	1669	C	PHE	402	17.865	56.933	86.483	1.00
	ATOM 36.67	1670	O	PHE	402	18.058	58.136	86.674	1.00
	ATOM 30.75	1671	N	PRO	403	18.722	56.166	85.781	1.00
25	ATOM 30.65	1672	CD	PRO	403	18.577	54.718	85.543	1.00
	ATOM 28.50	1673	CA	PRO	403	19.951	56.689	85.159	1.00
30	ATOM 29.37	1674	CB	PRO	403	20.524	55.465	84.409	1.00
	ATOM 30.78	1675	CG	PRO	403	19.990	54.288	85.229	1.00
	ATOM 26.46	1676	C	PRO	403	19.567	57.772	84.181	1.00
35	ATOM 26.61	1677	O	PRO	403	18.963	57.493	83.152	1.00
	ATOM 24.48	1678	N	ILE	404	19.941	59.004	84.496	1.00
40	ATOM 20.10	1680	CA	ILE	404	19.627	60.141	83.673	1.00
	ATOM 22.53	1681	CB	ILE	404	20.211	61.446	84.297	1.00
	ATOM 19.44	1682	CG2	ILE	404	20.006	62.648	83.363	1.00
45	ATOM 24.54	1683	CG1	ILE	404	19.574	61.677	85.652	1.00
	ATOM 27.14	1684	CD1	ILE	404	18.040	61.803	85.603	1.00
50	ATOM 18.42	1685	C	ILE	404	20.051	60.036	82.228	1.00
	ATOM 19.08	1686	O	ILE	404	19.273	60.342	81.342	1.00
	ATOM 19.47	1687	N	LYS	405	21.274	59.613	81.968	1.00
55	ATOM 17.69	1689	CA	LYS	405	21.741	59.560	80.575	1.00
	ATOM 19.78	1690	CB	LYS	405	23.244	59.319	80.543	1.00

	ATOM	1691	CG	LYS	405	24.007	60.419	81.214	1.00
	20.91								
	ATOM	1692	CD	LYS	405	25.504	60.285	81.004	1.00
	25.68								
5	ATOM	1693	CE	LYS	405	26.228	61.491	81.594	1.00
	25.97								
	ATOM	1694	NZ	LYS	405	27.619	61.628	81.058	1.00
	30.78								
10	ATOM	1698	C	LYS	405	21.024	58.584	79.649	1.00
	17.59								
	ATOM	1699	O	LYS	405	20.997	58.781	78.447	1.00
	17.74								
	ATOM	1700	N	TRP	406	20.439	57.533	80.198	1.00
	17.75								
15	ATOM	1702	CA	TRP	406	19.742	56.538	79.383	1.00
	18.37								
	ATOM	1703	CB	TRP	406	20.066	55.132	79.897	1.00
	19.40								
20	ATOM	1704	CG	TRP	406	21.359	54.653	79.472	1.00
	18.94								
	ATOM	1705	CD2	TRP	406	22.628	54.844	80.122	1.00
	19.38								
	ATOM	1706	CE2	TRP	406	23.589	54.168	79.342	1.00
	18.92								
25	ATOM	1707	CE3	TRP	406	23.035	55.510	81.292	1.00
	17.63								
	ATOM	1708	CD1	TRP	406	21.603	53.907	78.360	1.00
	18.56								
30	ATOM	1709	NE1	TRP	406	22.938	53.613	78.272	1.00
	18.76								
	ATOM	1711	CZ2	TRP	406	24.934	54.135	79.684	1.00
	18.38								
	ATOM	1712	CZ3	TRP	406	24.373	55.472	81.631	1.00
	18.43								
35	ATOM	1713	CH2	TRP	406	25.313	54.790	80.827	1.00
	20.51								
	ATOM	1714	C	TRP	406	18.221	56.667	79.414	1.00
	20.12								
40	ATOM	1715	O	TRP	406	17.529	56.117	78.571	1.00
	19.54								
	ATOM	1716	N	THR	407	17.701	57.377	80.400	1.00
	21.90								
	ATOM	1718	CA	THR	407	16.273	57.481	80.565	1.00
	20.95								
45	ATOM	1719	CB	THR	407	15.975	57.565	82.053	1.00
	21.49								
	ATOM	1720	OG1	THR	407	16.572	56.449	82.731	1.00
	21.33								
50	ATOM	1722	CG2	THR	407	14.463	57.568	82.320	1.00
	20.08								
	ATOM	1723	C	THR	407	15.595	58.637	79.784	1.00
	21.99								
	ATOM	1724	O	THR	407	16.066	59.766	79.777	1.00
	21.47								
55	ATOM	1725	N	ALA	408	14.453	58.355	79.160	1.00
	21.85								
	ATOM	1727	CA	ALA	408	13.698	59.383	78.403	1.00
	21.61								

	ATOM	1728	CB	ALA	408	12.470	58.761	77.725	1.00
	22.58								
	ATOM	1729	C	ALA	408	13.260	60.533	79.311	1.00
	21.12								
5	ATOM	1730	O	ALA	408	12.942	60.343	80.479	1.00
	22.30								
	ATOM	1731	N	PRO	409	13.197	61.739	78.768	1.00
	22.37								
10	ATOM	1732	CD	PRO	409	13.479	62.088	77.367	1.00
	21.70								
	ATOM	1733	CA	PRO	409	12.799	62.939	79.540	1.00
	22.65								
	ATOM	1734	CB	PRO	409	12.767	64.041	78.477	1.00
	21.61								
15	ATOM	1735	CG	PRO	409	13.763	63.578	77.460	1.00
	21.10								
	ATOM	1736	C	PRO	409	11.448	62.800	80.264	1.00
	23.34								
20	ATOM	1737	O	PRO	409	11.357	63.092	81.452	1.00
	23.23								
	ATOM	1738	N	GLU	410	10.435	62.271	79.586	1.00
	24.26								
	ATOM	1740	CA	GLU	410	9.136	62.137	80.239	1.00
	23.57								
25	ATOM	1741	CB	GLU	410	8.043	61.687	79.274	1.00
	23.95								
	ATOM	1742	CG	GLU	410	8.173	60.240	78.775	1.00
	25.44								
	ATOM	1743	CD	GLU	410	9.123	60.042	77.597	1.00
30	27.31								
	ATOM	1744	OE1	GLU	410	9.817	60.995	77.159	1.00
	26.56								
	ATOM	1745	OE2	GLU	410	9.158	58.915	77.064	1.00
	27.58								
35	ATOM	1746	C	GLU	410	9.210	61.207	81.415	1.00
	24.83								
	ATOM	1747	O	GLU	410	8.489	61.424	82.394	1.00
	28.35								
40	ATOM	1748	N	ALA	411	10.090	60.204	81.361	1.00
	24.70								
	ATOM	1750	CA	ALA	411	10.232	59.291	82.489	1.00
	24.06								
	ATOM	1751	CB	ALA	411	10.948	58.015	82.063	1.00
	23.48								
45	ATOM	1752	C	ALA	411	10.989	59.983	83.600	1.00
	22.89								
	ATOM	1753	O	ALA	411	10.670	59.809	84.759	1.00
	23.57								
50	ATOM	1754	N	ILE	412	12.036	60.730	83.251	1.00
	23.82								
	ATOM	1756	CA	ILE	412	12.805	61.463	84.279	1.00
	24.62								
	ATOM	1757	CB	ILE	412	14.035	62.160	83.657	1.00
	26.65								
55	ATOM	1758	CG2	ILE	412	14.670	63.166	84.650	1.00
	24.30								
	ATOM	1759	CG1	ILE	412	15.068	61.128	83.198	1.00
	26.80								



	ATOM	1760	CD1	ILE	412	16.199	61.747	82.363	1.00
	29.02								
	ATOM	1761	C	ILE	412	11.929	62.559	84.948	1.00
	23.45								
5	ATOM	1762	O	ILE	412	11.891	62.693	86.161	1.00
	21.71								
	ATOM	1763	N	ASN	413	11.191	63.292	84.129	1.00
	23.22								
10	ATOM	1765	CA	ASN	413	10.351	64.386	84.611	1.00
	27.01								
	ATOM	1766	CB	ASN	413	10.090	65.380	83.455	1.00
	25.92								
	ATOM	1767	CG	ASN	413	11.326	66.208	83.129	1.00
	25.74								
15	ATOM	1768	OD1	ASN	413	12.269	66.197	83.880	1.00
	27.88								
	ATOM	1769	ND2	ASN	413	11.268	66.991	82.074	1.00
	28.60								
20	ATOM	1772	C	ASN	413	9.013	64.013	85.297	1.00
	28.43								
	ATOM	1773	O	ASN	413	8.657	64.566	86.337	1.00
	28.15								
	ATOM	1774	N	TYR	414	8.315	63.038	84.722	1.00
	30.08								
25	ATOM	1776	CA	TYR	414	7.026	62.645	85.253	1.00
	30.85								
	ATOM	1777	CB	TYR	414	5.985	62.791	84.173	1.00
	29.88								
30	ATOM	1778	CG	TYR	414	6.134	64.027	83.348	1.00
	32.03								
	ATOM	1779	CD1	TYR	414	6.387	65.269	83.946	1.00
	33.46								
	ATOM	1780	CE1	TYR	414	6.507	66.424	83.184	1.00
	33.49								
35	ATOM	1781	CD2	TYR	414	6.012	63.984	81.971	1.00
	33.51								
	ATOM	1782	CE2	TYR	414	6.130	65.131	81.202	1.00
	34.46								
40	ATOM	1783	CZ	TYR	414	6.376	66.344	81.814	1.00
	35.28								
	ATOM	1784	OH	TYR	414	6.487	67.473	81.042	1.00
	37.44								
	ATOM	1786	C	TYR	414	6.946	61.239	85.810	1.00
	30.61								
45	ATOM	1787	O	TYR	414	5.931	60.884	86.397	1.00
	32.49								
	ATOM	1788	N	GLY	415	8.002	60.450	85.633	1.00
	29.99								
50	ATOM	1790	CA	GLY	415	7.966	59.086	86.132	1.00
	28.82								
	ATOM	1791	C	GLY	415	7.089	58.242	85.206	1.00
	28.52								
	ATOM	1792	O	GLY	415	6.753	57.092	85.481	1.00
	27.98								
55	ATOM	1793	N	THR	416	6.798	58.817	84.057	1.00
	27.94								
	ATOM	1795	CA	THR	416	5.954	58.204	83.076	1.00
	29.92								

	ATOM	1796	CB	THR	416	5.011	59.322	82.598	1.00
	32.60								
	ATOM	1797	OG1	THR	416	3.682	58.995	83.011	1.00
	37.83								
5	ATOM	1799	CG2	THR	416	5.107	59.645	81.141	1.00
	34.29								
	ATOM	1800	C	THR	416	6.735	57.382	81.997	1.00
	28.19								
10	ATOM	1801	O	THR	416	7.563	57.923	81.263	1.00
	28.30								
	ATOM	1802	N	PHE	417	6.534	56.058	81.996	1.00
	25.95								
	ATOM	1804	CA	PHE	417	7.252	55.157	81.088	1.00
	22.72								
15	ATOM	1805	CB	PHE	417	7.960	54.053	81.929	1.00
	22.06								
	ATOM	1806	CG	PHE	417	9.240	54.463	82.623	1.00
	19.89								
20	ATOM	1807	CD1	PHE	417	10.423	54.495	81.896	1.00
	20.48								
	ATOM	1808	CD2	PHE	417	9.318	54.638	84.014	1.00
	19.95								
	ATOM	1809	CE1	PHE	417	11.633	54.672	82.495	1.00
	18.79								
25	ATOM	1810	CE2	PHE	417	10.607	54.820	84.620	1.00
	20.32								
	ATOM	1811	CZ	PHE	417	11.732	54.828	83.830	1.00
	20.05								
30	ATOM	1812	C	PHE	417	6.343	54.447	80.051	1.00
	21.56								
	ATOM	1813	O	PHE	417	5.266	53.981	80.389	1.00
	20.78								
	ATOM	1814	N	THR	418	6.747	54.431	78.783	1.00
	19.69								
35	ATOM	1816	CA	THR	418	6.007	53.693	77.764	1.00
	20.67								
	ATOM	1817	CB	THR	418	5.148	54.590	76.854	1.00
	20.26								
40	ATOM	1818	OG1	THR	418	6.015	55.312	76.008	1.00
	25.33								
	ATOM	1820	CG2	THR	418	4.271	55.562	77.684	1.00
	21.05								
	ATOM	1821	C	THR	418	7.056	52.981	76.873	1.00
	20.77								
45	ATOM	1822	O	THR	418	8.262	53.163	77.050	1.00
	20.46								
	ATOM	1823	N	ILE	419	6.628	52.204	75.894	1.00
	19.91								
50	ATOM	1825	CA	ILE	419	7.596	51.546	75.059	1.00
	19.28								
	ATOM	1826	CB	ILE	419	6.906	50.615	74.033	1.00
	19.61								
	ATOM	1827	CG2	ILE	419	6.084	51.447	73.012	1.00
	17.68								
55	ATOM	1828	CG1	ILE	419	7.932	49.725	73.275	1.00
	16.37								
	ATOM	1829	CD1	ILE	419	8.633	48.748	74.143	1.00
	11.47								

	ATOM	1830	C	ILE	419	8.439	52.641	74.341	1.00
	20.48								
	ATOM	1831	O	ILE	419	9.552	52.369	73.871	1.00
	19.11								
5	ATOM	1832	N	LYS	420	7.866	53.847	74.198	1.00
	19.01								
	ATOM	1834	CA	LYS	420	8.554	54.973	73.550	1.00
	16.10								
10	ATOM	1835	CB	LYS	420	7.588	56.126	73.250	1.00
	15.15								
	ATOM	1836	CG	LYS	420	6.484	55.787	72.239	1.00
	15.77								
	ATOM	1837	CD	LYS	420	7.047	55.221	70.937	1.00
	14.36								
15	ATOM	1838	CE	LYS	420	5.948	55.081	69.907	1.00
	7.71								
	ATOM	1839	NZ	LYS	420	6.454	54.493	68.641	1.00
	12.60								
	ATOM	1843	C	LYS	420	9.713	55.474	74.404	1.00
20	14.10								
	ATOM	1844	O	LYS	420	10.612	56.062	73.882	1.00
	15.75								
	ATOM	1845	N	SER	421	9.634	55.280	75.719	0.84
	11.80								
25	ATOM	1847	CA	SER	421	10.705	55.605	76.605	0.84
	11.53								
	ATOM	1848	CB	SER	421	10.288	55.456	78.074	0.84
	10.22								
	ATOM	1849	OG	SER	421	9.162	56.223	78.370	0.84
30	13.84								
	ATOM	1851	C	SER	421	11.856	54.618	76.329	0.84
	13.00								
	ATOM	1852	O	SER	421	13.032	54.979	76.449	0.84
	11.53								
35	ATOM	1853	N	ASP	422	11.528	53.348	76.074	1.00
	15.55								
	ATOM	1855	CA	ASP	422	12.561	52.353	75.775	1.00
	14.65								
	ATOM	1856	CB	ASP	422	11.968	50.948	75.674	1.00
40	15.84								
	ATOM	1857	CG	ASP	422	11.668	50.329	77.007	1.00
	17.56								
	ATOM	1858	OD1	ASP	422	12.194	50.768	78.064	1.00
	17.02								
45	ATOM	1859	OD2	ASP	422	10.879	49.371	76.982	1.00
	18.39								
	ATOM	1860	C	ASP	422	13.211	52.708	74.447	1.00
	15.67								
	ATOM	1861	O	ASP	422	14.403	52.482	74.256	1.00
50	18.05								
	ATOM	1862	N	VAL	423	12.419	53.237	73.518	1.00
	14.52								
	ATOM	1864	CA	VAL	423	12.956	53.641	72.215	1.00
	14.96								
55	ATOM	1865	CB	VAL	423	11.852	54.135	71.290	1.00
	13.71								
	ATOM	1866	CG1	VAL	423	12.434	54.804	70.050	1.00
	11.97								

	ATOM	1867	CG2	VAL	423	10.995	52.940	70.853	1.00
	11.91								
	ATOM	1868	C	VAL	423	14.042	54.737	72.400	1.00
	15.31								
5	ATOM	1869	O	VAL	423	15.084	54.665	71.765	1.00
	16.48								
	ATOM	1870	N	TRP	424	13.786	55.679	73.309	1.00
	14.64								
10	ATOM	1872	CA	TRP	424	14.778	56.726	73.584	1.00
	16.07								
	ATOM	1873	CB	TRP	424	14.229	57.698	74.643	1.00
	16.52								
	ATOM	1874	CG	TRP	424	15.185	58.718	75.027	1.00
	18.45								
15	ATOM	1875	CD2	TRP	424	15.141	60.102	74.686	1.00
	18.79								
	ATOM	1876	CE2	TRP	424	16.277	60.700	75.259	1.00
	19.83								
	ATOM	1877	CE3	TRP	424	14.239	60.887	73.958	1.00
20	20.12								
	ATOM	1878	CD1	TRP	424	16.312	58.548	75.780	1.00
	18.97								
	ATOM	1879	NE1	TRP	424	16.961	59.724	75.931	1.00
	16.31								
25	ATOM	1881	CZ2	TRP	424	16.561	62.081	75.122	1.00
	20.80								
	ATOM	1882	CZ3	TRP	424	14.506	62.268	73.824	1.00
	19.39								
	ATOM	1883	CH2	TRP	424	15.655	62.840	74.397	1.00
30	19.97								
	ATOM	1884	C	TRP	424	16.060	56.041	74.127	1.00
	12.71								
	ATOM	1885	O	TRP	424	17.176	56.337	73.641	1.00
	11.08								
35	ATOM	1886	N	SER	425	15.884	55.140	75.103	0.74
	8.75								
	ATOM	1888	CA	SER	425	17.020	54.421	75.678	0.74
	10.92								
	ATOM	1889	CB	SER	425	16.555	53.443	76.749	0.74
40	12.58								
	ATOM	1890	OG	SER	425	15.843	54.097	77.763	0.74
	14.72								
	ATOM	1892	C	SER	425	17.785	53.651	74.607	0.74
	10.97								
45	ATOM	1893	O	SER	425	19.010	53.594	74.636	0.74
	12.46								
	ATOM	1894	N	PHE	426	17.057	53.069	73.661	1.00
	11.96								
	ATOM	1896	CA	PHE	426	17.696	52.350	72.579	1.00
50	13.86								
	ATOM	1897	CB	PHE	426	16.674	51.731	71.656	1.00
	11.32								
	ATOM	1898	CG	PHE	426	17.268	50.930	70.536	1.00
	12.43								
55	ATOM	1899	CD1	PHE	426	17.850	49.676	70.798	1.00
	11.39								
	ATOM	1900	CD2	PHE	426	17.279	51.424	69.249	1.00
	11.59								

	ATOM 10.37	1901	CE1	PHE	426	18.419	48.961	69.779	1.00
	ATOM 11.36	1902	CE2	PHE	426	17.866	50.689	68.215	1.00
5	ATOM 9.95	1903	CZ	PHE	426	18.430	49.456	68.498	1.00
	ATOM 14.91	1904	C	PHE	426	18.619	53.298	71.807	1.00
10	ATOM 16.79	1905	O	PHE	426	19.710	52.881	71.379	1.00
	ATOM 15.14	1906	N	GLY	427	18.175	54.530	71.574	1.00
	ATOM 16.07	1908	CA	GLY	427	19.005	55.494	70.858	1.00
15	ATOM 15.29	1909	C	GLY	427	20.333	55.675	71.592	1.00
	ATOM 15.59	1910	O	GLY	427	21.367	55.736	70.961	1.00
20	ATOM 13.04	1911	N	ILE	428	20.274	55.821	72.915	1.00
	ATOM 13.65	1913	CA	ILE	428	21.435	55.958	73.739	1.00
	ATOM 15.69	1914	CB	ILE	428	21.042	56.193	75.213	1.00
25	ATOM 14.46	1915	CG2	ILE	428	22.306	56.326	76.077	1.00
	ATOM 17.63	1916	CG1	ILE	428	20.175	57.467	75.342	1.00
30	ATOM 15.45	1917	CD1	ILE	428	20.855	58.757	74.831	1.00
	ATOM 16.99	1918	C	ILE	428	22.304	54.666	73.630	1.00
	ATOM 14.96	1919	O	ILE	428	23.523	54.728	73.492	1.00
35	ATOM 18.20	1920	N	LEU	429	21.654	53.513	73.675	1.00
	ATOM 18.84	1922	CA	LEU	429	22.349	52.229	73.557	1.00
40	ATOM 19.87	1923	CB	LEU	429	21.344	51.066	73.695	1.00
	ATOM 20.75	1924	CG	LEU	429	21.890	49.653	73.876	1.00
	ATOM 18.75	1925	CD1	LEU	429	20.791	48.727	74.436	1.00
45	ATOM 21.10	1926	CD2	LEU	429	22.409	49.128	72.549	1.00
	ATOM 17.14	1927	C	LEU	429	23.113	52.182	72.238	1.00
50	ATOM 17.44	1928	O	LEU	429	24.239	51.706	72.197	1.00
	ATOM 15.39	1929	N	LEU	430	22.525	52.706	71.164	1.00
	ATOM 15.10	1931	CA	LEU	430	23.241	52.725	69.908	1.00
55	ATOM 15.61	1932	CB	LEU	430	22.412	53.360	68.800	1.00
	ATOM 18.59	1933	CG	LEU	430	21.155	52.641	68.351	1.00

	ATOM 14.20	1934	CD1	LEU	430	20.470	53.464	67.278	1.00
	ATOM 16.64	1935	CD2	LEU	430	21.518	51.242	67.828	1.00
5	ATOM 16.62	1936	C	LEU	430	24.587	53.492	70.017	1.00
	ATOM 15.61	1937	O	LEU	430	25.539	53.148	69.330	1.00
10	ATOM 19.39	1938	N	THR	431	24.644	54.537	70.847	1.00
	ATOM 19.11	1940	CA	THR	431	25.901	55.294	71.008	1.00
	ATOM 15.34	1941	CB	THR	431	25.742	56.667	71.758	1.00
15	ATOM 12.80	1942	OG1	THR	431	25.465	56.469	73.143	1.00
	ATOM 13.08	1944	CG2	THR	431	24.630	57.456	71.164	1.00
20	ATOM 19.79	1945	C	THR	431	26.909	54.411	71.733	1.00
	ATOM 20.57	1946	O	THR	431	28.105	54.447	71.414	1.00
	ATOM 19.43	1947	N	GLU	432	26.444	53.600	72.693	1.00
25	ATOM 18.07	1949	CA	GLU	432	27.361	52.697	73.389	1.00
	ATOM 19.17	1950	CB	GLU	432	26.665	51.930	74.493	1.00
30	ATOM 17.14	1951	CG	GLU	432	26.127	52.805	75.603	1.00
	ATOM 17.70	1952	CD	GLU	432	25.461	52.018	76.673	1.00
	ATOM 15.03	1953	OE1	GLU	432	24.287	51.671	76.452	1.00
35	ATOM 21.38	1954	OE2	GLU	432	26.089	51.738	77.711	1.00
	ATOM 20.42	1955	C	GLU	432	27.935	51.673	72.387	1.00
40	ATOM 21.99	1956	O	GLU	432	29.117	51.311	72.447	1.00
	ATOM 17.57	1957	N	ILE	433	27.124	51.244	71.442	1.00
	ATOM 17.15	1959	CA	ILE	433	27.610	50.277	70.481	1.00
45	ATOM 13.48	1960	CB	ILE	433	26.456	49.748	69.615	1.00
	ATOM 14.99	1961	CG2	ILE	433	26.969	49.056	68.369	1.00
50	ATOM 14.70	1962	CG1	ILE	433	25.569	48.827	70.453	1.00
	ATOM 15.32	1963	CD1	ILE	433	24.356	48.293	69.661	1.00
	ATOM 19.95	1964	C	ILE	433	28.712	50.851	69.583	1.00
55	ATOM 21.11	1965	O	ILE	433	29.805	50.280	69.460	1.00
	ATOM 20.59	1966	N	VAL	434	28.420	51.988	68.953	1.00

	ATOM 19.04	1968	CA	VAL	434	29.353	52.602	68.038	1.00
	ATOM 19.75	1969	CB	VAL	434	28.610	53.644	67.140	1.00
5	ATOM 16.22	1970	CG1	VAL	434	28.609	55.040	67.759	1.00
	ATOM 22.03	1971	CG2	VAL	434	29.164	53.625	65.724	1.00
10	ATOM 18.85	1972	C	VAL	434	30.650	53.137	68.721	1.00
	ATOM 21.33	1973	O	VAL	434	31.668	53.256	68.078	1.00
	ATOM 18.23	1974	N	THR	435	30.626	53.364	70.026	1.00
15	ATOM 18.93	1976	CA	THR	435	31.824	53.837	70.716	1.00
	ATOM 16.49	1977	CB	THR	435	31.495	54.993	71.674	1.00
20	ATOM 16.60	1978	OG1	THR	435	30.641	54.492	72.693	1.00
	ATOM 12.43	1980	CG2	THR	435	30.795	56.146	70.909	1.00
	ATOM 21.45	1981	C	THR	435	32.485	52.714	71.546	1.00
25	ATOM 20.04	1982	O	THR	435	33.347	52.983	72.400	1.00
	ATOM 20.62	1983	N	HIS	436	32.077	51.460	71.293	1.00
30	ATOM 19.62	1985	CA	HIS	436	32.610	50.333	72.044	1.00
	ATOM 23.29	1986	CB	HIS	436	34.038	50.024	71.638	1.00
	ATOM 25.16	1987	CG	HIS	436	34.155	49.533	70.236	1.00
35	ATOM 26.06	1988	CD2	HIS	436	34.147	50.195	69.060	1.00
	ATOM 26.86	1989	ND1	HIS	436	34.209	48.184	69.919	1.00
40	ATOM 24.56	1991	CE1	HIS	436	34.212	48.047	68.596	1.00
	ATOM 26.47	1992	NE2	HIS	436	34.174	49.251	68.056	1.00
	ATOM 18.57	1994	C	HIS	436	32.515	50.473	73.540	1.00
45	ATOM 19.06	1995	O	HIS	436	33.474	50.250	74.248	1.00
	ATOM 19.54	1996	N	GLY	437	31.342	50.884	74.001	1.00
50	ATOM 18.07	1998	CA	GLY	437	31.109	50.994	75.427	1.00
	ATOM 19.71	1999	C	GLY	437	31.368	52.280	76.155	1.00
	ATOM 23.18	2000	O	GLY	437	31.265	52.264	77.382	1.00
55	ATOM 17.74	2001	N	ARG	438	31.625	53.379	75.451	0.58
	ATOM 16.96	2003	CA	ARG	438	31.863	54.659	76.118	0.58

	ATOM 18.69	2004	CB	ARG	438	32.322	55.699	75.072	0.58
	ATOM 24.05	2005	CG	ARG	438	32.916	56.962	75.643	0.58
5	ATOM 24.65	2006	CD	ARG	438	33.318	57.941	74.525	0.58
	ATOM 30.19	2007	NE	ARG	438	34.286	58.933	74.994	0.58
10	ATOM 31.90	2009	CZ	ARG	438	34.556	60.070	74.353	0.58
	ATOM 34.48	2010	NH1	ARG	438	33.936	60.369	73.228	0.58
	ATOM 34.48	2013	NH2	ARG	438	35.437	60.923	74.844	0.58
15	ATOM 15.26	2016	C	ARG	438	30.591	55.152	76.810	0.58
	ATOM 13.56	2017	O	ARG	438	29.497	54.837	76.393	0.58
20	ATOM 16.65	2018	N	ILE	439	30.735	55.878	77.901	1.00
	ATOM 17.06	2020	CA	ILE	439	29.608	56.467	78.618	1.00
	ATOM 20.85	2021	CB	ILE	439	30.086	57.074	79.945	1.00
25	ATOM 21.06	2022	CG2	ILE	439	28.983	57.937	80.589	1.00
	ATOM 21.92	2023	CG1	ILE	439	30.501	55.933	80.883	1.00
30	ATOM 22.55	2024	CD1	ILE	439	31.070	56.392	82.180	1.00
	ATOM 15.41	2025	C	ILE	439	29.001	57.572	77.748	1.00
	ATOM 16.20	2026	O	ILE	439	29.752	58.391	77.165	1.00
35	ATOM 10.45	2027	N	PRO	440	27.665	57.580	77.594	0.43
	ATOM 5.92	2028	CD	PRO	440	26.703	56.670	78.229	0.43
40	ATOM 9.30	2029	CA	PRO	440	26.983	58.587	76.776	0.43
	ATOM 7.88	2030	CB	PRO	440	25.516	58.151	76.850	0.43
	ATOM 7.57	2031	CG	PRO	440	25.433	57.460	78.165	0.43
45	ATOM 8.71	2032	C	PRO	440	27.190	60.024	77.272	0.43
	ATOM 6.28	2033	O	PRO	440	27.501	60.252	78.432	0.43
50	ATOM 11.99	2034	N	TYR	441	27.103	60.972	76.359	1.00
	ATOM 16.68	2036	CA	TYR	441	27.259	62.401	76.693	1.00
	ATOM 14.19	2037	CB	TYR	441	26.179	62.876	77.658	1.00
55	ATOM 16.13	2038	CG	TYR	441	24.789	62.722	77.105	1.00
	ATOM 13.76	2039	CD1	TYR	441	24.265	63.645	76.185	1.00



	ATOM	2040	CE1	TYR	441	22.966	63.522	75.713	1.00
	14.57								
	ATOM	2041	CD2	TYR	441	23.973	61.666	77.526	1.00
	15.68								
5	ATOM	2042	CE2	TYR	441	22.671	61.524	77.057	1.00
	14.69								
	ATOM	2043	CZ	TYR	441	22.168	62.465	76.146	1.00
	16.03								
10	ATOM	2044	OH	TYR	441	20.870	62.338	75.699	1.00
	16.22								
	ATOM	2046	C	TYR	441	28.635	62.642	77.299	1.00
	19.83								
	ATOM	2047	O	TYR	441	28.761	63.055	78.433	1.00
	22.48								
15	ATOM	2048	N	PRO	442	29.683	62.308	76.550	1.00
	21.96								
	ATOM	2049	CD	PRO	442	29.621	61.815	75.149	1.00
	23.72								
	ATOM	2050	CA	PRO	442	31.058	62.478	76.991	1.00
20	24.18								
	ATOM	2051	CB	PRO	442	31.849	62.276	75.687	1.00
	23.93								
	ATOM	2052	CG	PRO	442	30.987	61.262	74.932	1.00
	23.15								
25	ATOM	2053	C	PRO	442	31.353	63.888	77.593	1.00
	23.56								
	ATOM	2054	O	PRO	442	30.954	64.906	77.047	1.00
	22.74								
	ATOM	2055	N	GLY	443	31.984	63.889	78.751	1.00
30	23.98								
	ATOM	2057	CA	GLY	443	32.365	65.116	79.423	1.00
	25.02								
	ATOM	2058	C	GLY	443	31.223	65.938	80.001	1.00
	25.31								
35	ATOM	2059	O	GLY	443	31.427	67.108	80.330	1.00
	27.52								
	ATOM	2060	N	MET	444	30.040	65.347	80.141	1.00
	22.78								
	ATOM	2062	CA	MET	444	28.904	66.081	80.676	1.00
40	19.38								
	ATOM	2063	CB	MET	444	27.804	66.213	79.642	1.00
	17.92								
	ATOM	2064	CG	MET	444	28.205	66.965	78.383	1.00
	15.75								
45	ATOM	2065	SD	MET	444	27.016	66.876	77.050	1.00
	20.93								
	ATOM	2066	CE	MET	444	25.610	67.571	77.794	1.00
	15.12								
	ATOM	2067	C	MET	444	28.330	65.475	81.935	1.00
50	20.07								
	ATOM	2068	O	MET	444	28.210	64.248	82.042	1.00
	22.27								
	ATOM	2069	N	THR	445	27.978	66.348	82.880	1.00
	19.84								
55	ATOM	2071	CA	THR	445	27.372	65.932	84.106	1.00
	19.22								
	ATOM	2072	CB	THR	445	27.576	66.964	85.238	1.00
	23.06								

5	ATOM 23.49	2073	OG1	THR	445	26.830	68.164	84.934	1.00
	ATOM 24.46	2075	CG2	THR	445	29.102	67.271	85.392	1.00
	ATOM 18.15	2076	C	THR	445	25.881	65.741	83.788	1.00
	ATOM 17.17	2077	O	THR	445	25.388	66.088	82.718	1.00
10	ATOM 18.92	2078	N	ASN	446	25.163	65.120	84.684	1.00
	ATOM 22.14	2080	CA	ASN	446	23.757	64.962	84.384	1.00
	ATOM 22.94	2081	CB	ASN	446	23.118	64.029	85.368	1.00
	ATOM 23.33	2082	CG	ASN	446	23.520	62.605	85.162	1.00
15	ATOM 27.45	2083	OD1	ASN	446	23.620	62.087	84.063	1.00
	ATOM 20.08	2084	ND2	ASN	446	23.650	61.925	86.254	1.00
	ATOM 21.36	2087	C	ASN	446	22.998	66.279	84.316	1.00
	ATOM 22.94	2088	O	ASN	446	22.103	66.415	83.504	1.00
25	ATOM 21.41	2089	N	PRO	447	23.291	67.216	85.237	1.00
	ATOM 19.28	2090	CD	PRO	447	24.006	67.063	86.516	1.00
	ATOM 19.53	2091	CA	PRO	447	22.599	68.504	85.173	1.00
	ATOM 20.05	2092	CB	PRO	447	23.242	69.293	86.331	1.00
30	ATOM 20.54	2093	CG	PRO	447	23.430	68.199	87.372	1.00
	ATOM 18.40	2094	C	PRO	447	22.884	69.115	83.783	1.00
	ATOM 18.87	2095	O	PRO	447	21.982	69.684	83.162	1.00
	ATOM 17.60	2096	N	GLU	448	24.079	68.932	83.241	1.00
40	ATOM 17.50	2098	CA	GLU	448	24.383	69.494	81.888	1.00
	ATOM 17.69	2099	CB	GLU	448	25.875	69.386	81.562	1.00
	ATOM 20.35	2100	CG	GLU	448	26.730	70.197	82.503	1.00
	ATOM 22.71	2101	CD	GLU	448	28.202	70.065	82.200	1.00
50	ATOM 21.71	2102	OE1	GLU	448	28.742	68.945	82.274	1.00
	ATOM 29.91	2103	OE2	GLU	448	28.838	71.083	81.865	1.00
	ATOM 18.43	2104	C	GLU	448	23.601	68.769	80.802	1.00
	ATOM 17.96	2105	O	GLU	448	23.234	69.358	79.781	1.00
55	ATOM 19.16	2106	N	VAL	449	23.444	67.446	80.976	1.00

	ATOM	2108	CA	VAL	449	22.649	66.685	80.003	1.00
	19.42								
	ATOM	2109	CB	VAL	449	22.680	65.134	80.205	1.00
	18.44								
5	ATOM	2110	CG1	VAL	449	21.890	64.507	79.102	1.00
	18.24								
	ATOM	2111	CG2	VAL	449	24.106	64.594	80.094	1.00
	16.28								
10	ATOM	2112	C	VAL	449	21.188	67.190	80.005	1.00
	16.19								
	ATOM	2113	O	VAL	449	20.644	67.474	78.956	1.00
	18.65								
	ATOM	2114	N	ILE	450	20.608	67.337	81.179	0.60
	14.24								
15	ATOM	2116	CA	ILE	450	19.246	67.835	81.301	0.60
	15.95								
	ATOM	2117	CB	ILE	450	18.850	67.860	82.769	0.60
	14.74								
20	ATOM	2118	CG2	ILE	450	17.535	68.649	82.967	0.60
	11.72								
	ATOM	2119	CG1	ILE	450	18.714	66.416	83.280	0.60
	13.82								
	ATOM	2120	CD1	ILE	450	18.473	66.323	84.762	0.60
	16.21								
25	ATOM	2121	C	ILE	450	19.102	69.240	80.680	0.60
	17.69								
	ATOM	2122	O	ILE	450	18.164	69.498	79.944	0.60
	16.19								
30	ATOM	2123	N	GLN	451	20.052	70.123	80.972	1.00
	22.22								
	ATOM	2125	CA	GLN	451	20.038	71.469	80.438	1.00
	23.33								
	ATOM	2126	CB	GLN	451	21.165	72.291	81.113	1.00
	29.28								
35	ATOM	2127	CG	GLN	451	21.698	73.572	80.452	1.00
	38.30								
	ATOM	2128	CD	GLN	451	23.250	73.598	80.516	1.00
	44.81								
40	ATOM	2129	OE1	GLN	451	23.870	73.579	81.599	1.00
	47.60								
	ATOM	2130	NE2	GLN	451	23.871	73.533	79.341	1.00
	47.62								
	ATOM	2133	C	GLN	451	20.112	71.447	78.914	1.00
	22.37								
45	ATOM	2134	O	GLN	451	19.300	72.094	78.265	1.00
	21.86								
	ATOM	2135	N	ASN	452	20.998	70.644	78.346	1.00
	21.50								
50	ATOM	2137	CA	ASN	452	21.105	70.604	76.893	1.00
	23.60								
	ATOM	2138	CB	ASN	452	22.291	69.730	76.475	1.00
	30.33								
	ATOM	2139	CG	ASN	452	23.620	70.476	76.472	1.00
	33.45								
55	ATOM	2140	OD1	ASN	452	24.582	70.027	75.827	1.00
	38.19								
	ATOM	2141	ND2	ASN	452	23.688	71.601	77.179	1.00
	33.08								

	ATOM 24.20	2144	C	ASN	452	19.840	70.063	76.224	1.00
	ATOM 25.63	2145	O	ASN	452	19.408	70.546	75.168	1.00
5	ATOM 22.63	2146	N	LEU	453	19.298	68.988	76.787	1.00
	ATOM 20.88	2148	CA	LEU	453	18.111	68.402	76.191	1.00
10	ATOM 19.15	2149	CB	LEU	453	17.735	67.131	76.911	1.00
	ATOM 20.09	2150	CG	LEU	453	18.640	66.041	76.303	1.00
	ATOM 19.24	2151	CD1	LEU	453	18.704	65.061	77.381	1.00
15	ATOM 19.91	2152	CD2	LEU	453	18.171	65.442	74.999	1.00
	ATOM 20.98	2153	C	LEU	453	16.953	69.359	76.154	1.00
20	ATOM 20.40	2154	O	LEU	453	16.247	69.482	75.150	1.00
	ATOM 20.29	2155	N	GLU	454	16.849	70.134	77.215	1.00
	ATOM 20.69	2157	CA	GLU	454	15.777	71.091	77.333	1.00
25	ATOM 22.44	2158	CB	GLU	454	15.636	71.460	78.808	1.00
	ATOM 26.95	2159	CG	GLU	454	14.691	70.571	79.652	1.00
30	ATOM 32.80	2160	CD	GLU	454	14.860	70.937	81.103	1.00
	ATOM 35.24	2161	OE1	GLU	454	15.655	71.869	81.371	1.00
	ATOM 36.29	2162	OE2	GLU	454	14.234	70.303	81.985	1.00
35	ATOM 19.99	2163	C	GLU	454	15.940	72.301	76.361	1.00
	ATOM 19.52	2164	O	GLU	454	14.950	72.951	76.027	1.00
40	ATOM 17.70	2165	N	ARG	455	17.141	72.486	75.781	1.00
	ATOM 17.77	2167	CA	ARG	455	17.386	73.552	74.782	1.00
	ATOM 18.95	2168	CB	ARG	455	18.844	74.021	74.771	1.00
45	ATOM 22.96	2169	CG	ARG	455	19.356	74.547	76.074	1.00
	ATOM 23.08	2170	CD	ARG	455	20.763	75.090	75.932	1.00
50	ATOM 25.12	2171	NE	ARG	455	20.833	76.222	75.012	1.00
	ATOM 24.77	2173	CZ	ARG	455	21.969	76.855	74.680	1.00
	ATOM 22.66	2174	NH1	ARG	455	23.139	76.455	75.192	1.00
55	ATOM 19.61	2177	NH2	ARG	455	21.926	77.913	73.881	1.00
	ATOM 18.74	2180	C	ARG	455	17.114	73.011	73.385	1.00

	ATOM 18.28	2181	O	ARG	455	17.200	73.728	72.402	1.00
	ATOM 20.31	2182	N	GLY	456	16.807	71.716	73.285	1.00
5	ATOM 18.59	2184	CA	GLY	456	16.597	71.101	71.977	1.00
	ATOM 18.02	2185	C	GLY	456	17.849	70.367	71.487	1.00
10	ATOM 17.58	2186	O	GLY	456	17.828	69.804	70.405	1.00
	ATOM 18.14	2187	N	TYR	457	18.945	70.432	72.210	1.00
	ATOM 19.56	2189	CA	TYR	457	20.149	69.747	71.750	1.00
15	ATOM 17.10	2190	CB	TYR	457	21.385	70.191	72.541	1.00
	ATOM 17.96	2191	CG	TYR	457	21.894	71.591	72.302	1.00
20	ATOM 19.20	2192	CD1	TYR	457	21.478	72.352	71.226	1.00
	ATOM 19.38	2193	CE1	TYR	457	21.992	73.637	71.008	1.00
	ATOM 20.40	2194	CD2	TYR	457	22.836	72.138	73.170	1.00
25	ATOM 19.97	2195	CE2	TYR	457	23.347	73.404	72.960	1.00
	ATOM 17.83	2196	CZ	TYR	457	22.920	74.135	71.879	1.00
30	ATOM 17.07	2197	OH	TYR	457	23.472	75.385	71.675	1.00
	ATOM 20.03	2199	C	TYR	457	20.021	68.246	72.034	1.00
	ATOM 18.91	2200	O	TYR	457	19.221	67.828	72.870	1.00
35	ATOM 20.26	2201	N	ARG	458	20.819	67.445	71.340	1.00
	ATOM 19.25	2203	CA	ARG	458	20.854	66.013	71.608	1.00
40	ATOM 17.50	2204	CB	ARG	458	20.175	65.210	70.495	1.00
	ATOM 14.01	2205	CG	ARG	458	18.652	65.394	70.441	1.00
	ATOM 13.72	2206	CD	ARG	458	17.986	65.025	71.777	1.00
45	ATOM 15.54	2207	NE	ARG	458	16.528	65.083	71.689	1.00
	ATOM 17.63	2209	CZ	ARG	458	15.776	66.071	72.199	1.00
50	ATOM 18.53	2210	NH1	ARG	458	16.347	67.098	72.825	1.00
	ATOM 14.13	2213	NH2	ARG	458	14.444	66.012	72.092	1.00
	ATOM 19.83	2216	C	ARG	458	22.325	65.657	71.718	1.00
55	ATOM 17.44	2217	O	ARG	458	23.195	66.530	71.557	1.00
	ATOM 17.91	2218	N	MET	459	22.628	64.380	71.961	1.00

	ATOM	2220	CA	MET	459	24.043	64.001	72.101	1.00
	15.97								
	ATOM	2221	CB	MET	459	24.199	62.503	72.377	1.00
	15.95								
5	ATOM	2222	CG	MET	459	25.568	62.127	72.906	1.00
	15.08								
	ATOM	2223	SD	MET	459	25.816	60.318	73.149	1.00
	19.19								
10	ATOM	2224	CE	MET	459	24.291	59.886	73.995	1.00
	17.66								
	ATOM	2225	C	MET	459	24.854	64.341	70.872	1.00
	15.70								
	ATOM	2226	O	MET	459	24.419	64.145	69.726	1.00
	14.70								
15	ATOM	2227	N	VAL	460	26.046	64.885	71.098	1.00
	15.83								
	ATOM	2229	CA	VAL	460	26.935	65.234	70.021	1.00
	14.18								
	ATOM	2230	CB	VAL	460	28.245	65.833	70.624	1.00
20	17.78								
	ATOM	2231	CG1	VAL	460	29.355	65.930	69.544	1.00
	19.44								
	ATOM	2232	CG2	VAL	460	27.956	67.209	71.227	1.00
	15.84								
25	ATOM	2233	C	VAL	460	27.295	63.950	69.235	1.00
	15.35								
	ATOM	2234	O	VAL	460	27.398	62.886	69.833	1.00
	17.60								
	ATOM	2235	N	ARG	461	27.463	64.046	67.924	1.00
30	14.74								
	ATOM	2237	CA	ARG	461	27.858	62.899	67.114	1.00
	20.91								
	ATOM	2238	CB	ARG	461	28.214	63.364	65.695	1.00
	17.94								
35	ATOM	2239	CG	ARG	461	27.058	63.957	64.917	1.00
	17.02								
	ATOM	2240	CD	ARG	461	27.500	64.354	63.533	1.00
	14.96								
	ATOM	2241	NE	ARG	461	26.364	64.666	62.692	1.00
40	17.42								
	ATOM	2243	CZ	ARG	461	25.687	65.829	62.692	1.00
	18.25								
	ATOM	2244	NH1	ARG	461	26.033	66.825	63.493	1.00
	18.39								
45	ATOM	2247	NH2	ARG	461	24.645	65.985	61.881	1.00
	17.39								
	ATOM	2250	C	ARG	461	29.093	62.172	67.672	1.00
	24.64								
	ATOM	2251	O	ARG	461	30.143	62.800	67.840	1.00
50	26.86								
	ATOM	2252	N	PRO	462	28.974	60.863	68.043	1.00
	25.97								
	ATOM	2253	CD	PRO	462	27.723	60.100	68.164	1.00
	26.62								
55	ATOM	2254	CA	PRO	462	30.105	60.075	68.580	1.00
	26.30								
	ATOM	2255	CB	PRO	462	29.478	58.706	68.855	1.00
	25.21								

	ATOM 27.71	2256	CG	PRO	462	28.091	59.044	69.225	1.00
	ATOM 27.36	2257	C	PRO	462	31.186	59.973	67.531	1.00
5	ATOM 22.85	2258	O	PRO	462	30.887	60.074	66.349	1.00
	ATOM 33.07	2259	N	ASP	463	32.440	59.856	67.976	1.00
10	ATOM 36.40	2261	CA	ASP	463	33.542	59.724	67.037	1.00
	ATOM 42.61	2262	CB	ASP	463	34.905	59.513	67.731	1.00
	ATOM 46.87	2263	CG	ASP	463	35.486	60.802	68.343	1.00
15	ATOM 52.92	2264	OD1	ASP	463	35.313	61.884	67.723	1.00
	ATOM 48.62	2265	OD2	ASP	463	36.113	60.733	69.440	1.00
20	ATOM 36.01	2266	C	ASP	463	33.249	58.565	66.102	1.00
	ATOM 38.21	2267	O	ASP	463	32.726	57.512	66.506	1.00
	ATOM 34.27	2268	N	ASN	464	33.364	58.858	64.826	1.00
25	ATOM 33.69	2270	CA	ASN	464	33.164	57.823	63.884	1.00
	ATOM 37.65	2271	CB	ASN	464	34.310	56.892	64.024	1.00
30	ATOM 41.02	2272	CG	ASN	464	35.421	57.411	63.277	1.00
	ATOM 42.34	2273	OD1	ASN	464	36.530	57.497	63.748	1.00
	ATOM 46.22	2274	ND2	ASN	464	35.092	57.962	62.114	1.00
35	ATOM 31.02	2277	C	ASN	464	31.858	57.103	63.742	1.00
	ATOM 33.21	2278	O	ASN	464	31.769	55.942	63.346	1.00
40	ATOM 28.20	2279	N	CYS	465	30.831	57.839	64.091	1.00
	ATOM 23.77	2281	CA	CYS	465	29.512	57.312	63.948	1.00
	ATOM 22.59	2282	CB	CYS	465	28.624	57.996	64.957	1.00
45	ATOM 20.23	2283	SG	CYS	465	26.940	57.347	64.922	1.00
	ATOM 20.29	2284	C	CYS	465	29.009	57.609	62.534	1.00
50	ATOM 20.20	2285	O	CYS	465	29.113	58.722	62.076	1.00
	ATOM 19.54	2286	N	PRO	466	28.580	56.571	61.785	1.00
	ATOM 18.45	2287	CD	PRO	466	28.614	55.148	62.170	1.00
55	ATOM 17.34	2288	CA	PRO	466	28.044	56.745	60.424	1.00
	ATOM 17.76	2289	CB	PRO	466	27.528	55.340	60.086	1.00

	ATOM	2290	CG	PRO	466	28.454	54.452	60.853	1.00
	18.34								
	ATOM	2291	C	PRO	466	26.833	57.713	60.603	1.00
	17.27								
5	ATOM	2292	O	PRO	466	26.087	57.593	61.573	1.00
	15.23								
	ATOM	2293	N	GLU	467	26.693	58.678	59.702	1.00
	18.48								
10	ATOM	2295	CA	GLU	467	25.622	59.652	59.830	1.00
	18.82								
	ATOM	2296	CB	GLU	467	25.850	60.793	58.830	1.00
	17.73								
	ATOM	2297	CG	GLU	467	25.269	62.174	59.193	1.00
	17.92								
15	ATOM	2298	CD	GLU	467	25.281	62.575	60.623	1.00
	16.81								
	ATOM	2299	OE1	GLU	467	26.239	62.494	61.391	1.00
	20.48								
	ATOM	2300	OE2	GLU	467	24.245	63.097	60.907	1.00
20	19.26								
	ATOM	2301	C	GLU	467	24.233	59.009	59.717	1.00
	16.25								
	ATOM	2302	O	GLU	467	23.296	59.473	60.377	1.00
	18.45								
25	ATOM	2303	N	GLU	468	24.109	57.933	58.948	0.51
	12.70								
	ATOM	2305	CA	GLU	468	22.824	57.230	58.840	0.51
	9.87								
	ATOM	2306	CB	GLU	468	22.881	56.084	57.826	0.51
30	9.75								
	ATOM	2307	CG	GLU	468	22.768	56.476	56.373	0.51
	12.87								
	ATOM	2308	CD	GLU	468	23.600	55.604	55.454	0.51
	16.73								
35	ATOM	2309	OE1	GLU	468	24.697	55.613	55.289	0.51
	21.01								
	ATOM	2310	OE2	GLU	468	23.104	54.806	54.715	0.51
	19.71								
40	ATOM	2311	C	GLU	468	22.427	56.693	60.208	0.51
	7.61								
	ATOM	2312	O	GLU	468	21.285	56.793	60.593	0.51
	5.14								
	ATOM	2313	N	LEU	469	23.383	56.173	60.961	1.00
	11.98								
45	ATOM	2315	CA	LEU	469	23.088	55.669	62.295	1.00
	13.45								
	ATOM	2316	CB	LEU	469	24.255	54.815	62.821	1.00
	16.09								
	ATOM	2317	CG	LEU	469	24.011	54.128	64.188	1.00
50	18.21								
	ATOM	2318	CD1	LEU	469	22.896	53.133	64.027	1.00
	19.45								
	ATOM	2319	CD2	LEU	469	25.309	53.401	64.621	1.00
	20.80								
55	ATOM	2320	C	LEU	469	22.810	56.829	63.234	1.00
	14.50								
	ATOM	2321	O	LEU	469	21.922	56.748	64.097	1.00
	13.69								



	ATOM	2322	N	TYR	470	23.556	57.925	63.087	1.00
	15.76								
	ATOM	2324	CA	TYR	470	23.330	59.070	63.961	1.00
	15.69								
5	ATOM	2325	CB	TYR	470	24.347	60.190	63.676	1.00
	15.77								
	ATOM	2326	CG	TYR	470	24.177	61.346	64.628	1.00
	13.26								
10	ATOM	2327	CD1	TYR	470	24.383	61.192	65.989	1.00
	11.67								
	ATOM	2328	CE1	TYR	470	24.238	62.237	66.860	1.00
	14.86								
	ATOM	2329	CD2	TYR	470	23.799	62.610	64.152	1.00
	14.80								
15	ATOM	2330	CE2	TYR	470	23.648	63.674	65.007	1.00
	11.49								
	ATOM	2331	CZ	TYR	470	23.876	63.487	66.360	1.00
	14.26								
20	ATOM	2332	OH	TYR	470	23.829	64.533	67.259	1.00
	13.59								
	ATOM	2334	C	TYR	470	21.897	59.622	63.790	1.00
	15.89								
	ATOM	2335	O	TYR	470	21.222	59.948	64.748	1.00
	16.07								
25	ATOM	2336	N	GLN	471	21.458	59.722	62.563	1.00
	17.58								
	ATOM	2338	CA	GLN	471	20.122	60.197	62.267	1.00
	19.32								
30	ATOM	2339	CB	GLN	471	20.095	60.406	60.776	1.00
	20.31								
	ATOM	2340	CG	GLN	471	20.193	61.875	60.292	1.00
	27.33								
	ATOM	2341	CD	GLN	471	20.883	62.897	61.206	1.00
	28.92								
35	ATOM	2342	OE1	GLN	471	22.072	62.990	61.296	1.00
	36.59								
	ATOM	2343	NE2	GLN	471	20.103	63.750	61.758	1.00
	28.48								
40	ATOM	2346	C	GLN	471	19.025	59.212	62.785	1.00
	21.02								
	ATOM	2347	O	GLN	471	17.942	59.640	63.223	1.00
	22.52								
	ATOM	2348	N	LEU	472	19.337	57.916	62.835	1.00
	19.39								
45	ATOM	2350	CA	LEU	472	18.398	56.945	63.388	1.00
	19.13								
	ATOM	2351	CB	LEU	472	18.851	55.510	63.099	1.00
	22.09								
50	ATOM	2352	CG	LEU	472	17.826	54.393	63.372	1.00
	21.25								
	ATOM	2353	CD1	LEU	472	16.645	54.578	62.419	1.00
	21.50								
	ATOM	2354	CD2	LEU	472	18.486	53.021	63.134	1.00
	16.29								
55	ATOM	2355	C	LEU	472	18.313	57.183	64.917	1.00
	18.02								
	ATOM	2356	O	LEU	472	17.232	57.104	65.524	1.00
	19.05								

	ATOM 18.25	2357	N	MET	473	19.448	57.491	65.539	1.00
	ATOM 17.95	2359	CA	MET	473	19.449	57.813	66.976	1.00
5	ATOM 18.39	2360	CB	MET	473	20.836	58.137	67.466	1.00
	ATOM 19.12	2361	CG	MET	473	21.885	57.043	67.296	1.00
10	ATOM 17.70	2362	SD	MET	473	23.579	57.734	67.549	1.00
	ATOM 21.24	2363	CE	MET	473	24.541	56.279	67.611	1.00
	ATOM 17.42	2364	C	MET	473	18.567	59.055	67.233	1.00
15	ATOM 17.21	2365	O	MET	473	17.826	59.099	68.220	1.00
	ATOM 17.08	2366	N	ARG	474	18.648	60.043	66.342	1.00
20	ATOM 16.18	2368	CA	ARG	474	17.892	61.290	66.513	1.00
	ATOM 16.13	2369	CB	ARG	474	18.240	62.345	65.407	1.00
	ATOM 15.54	2370	CG	ARG	474	19.678	62.878	65.264	1.00
25	ATOM 17.62	2371	CD	ARG	474	20.206	63.766	66.340	1.00
	ATOM 25.22	2372	NE	ARG	474	19.690	65.108	66.507	1.00
30	ATOM 24.91	2374	CZ	ARG	474	20.451	66.074	66.989	1.00
	ATOM 21.73	2375	NH1	ARG	474	21.737	65.854	67.244	1.00
	ATOM 28.65	2378	NH2	ARG	474	19.827	67.067	67.594	1.00
35	ATOM 15.94	2381	C	ARG	474	16.374	60.982	66.462	1.00
	ATOM 18.86	2382	O	ARG	474	15.613	61.602	67.148	1.00
40	ATOM 16.10	2383	N	LEU	475	15.933	60.061	65.611	1.00
	ATOM 17.16	2385	CA	LEU	475	14.507	59.688	65.596	1.00
	ATOM 16.67	2386	CB	LEU	475	14.201	58.641	64.522	1.00
45	ATOM 18.23	2387	CG	LEU	475	14.260	58.919	63.031	1.00
	ATOM 20.24	2388	CD1	LEU	475	13.551	57.692	62.447	1.00
50	ATOM 19.21	2389	CD2	LEU	475	13.537	60.190	62.620	1.00
	ATOM 16.79	2390	C	LEU	475	14.103	59.119	66.949	1.00
	ATOM 17.89	2391	O	LEU	475	13.025	59.451	67.477	1.00
55	ATOM 16.31	2392	N	CYS	476	15.007	58.382	67.581	1.00
	ATOM 16.85	2394	CA	CYS	476	14.718	57.793	68.896	1.00

	ATOM 15.55	2395	CB	CYS	476	15.831	56.780	69.277	1.00
	ATOM 14.96	2396	SG	CYS	476	15.969	55.406	68.118	1.00
5	ATOM 17.41	2397	C	CYS	476	14.650	58.840	69.980	1.00
	ATOM 20.02	2398	O	CYS	476	14.159	58.563	71.058	1.00
10	ATOM 20.22	2399	N	TRP	477	15.236	60.016	69.704	1.00
	ATOM 19.77	2401	CA	TRP	477	15.284	61.111	70.682	1.00
	ATOM 19.85	2402	CB	TRP	477	16.689	61.668	70.808	1.00
15	ATOM 19.63	2403	CG	TRP	477	17.712	60.646	71.178	1.00
	ATOM 18.71	2404	CD2	TRP	477	19.084	60.628	70.782	1.00
20	ATOM 20.22	2405	CE2	TRP	477	19.682	59.507	71.392	1.00
	ATOM 18.45	2406	CE3	TRP	477	19.869	61.469	69.963	1.00
	ATOM 20.69	2407	CD1	TRP	477	17.537	59.565	71.995	1.00
25	ATOM 17.19	2408	NE1	TRP	477	18.721	58.877	72.136	1.00
	ATOM 16.34	2410	CZ2	TRP	477	21.060	59.190	71.216	1.00
30	ATOM 15.37	2411	CZ3	TRP	477	21.222	61.159	69.786	1.00
	ATOM 15.60	2412	CH2	TRP	477	21.796	60.035	70.416	1.00
	ATOM 19.98	2413	C	TRP	477	14.305	62.251	70.376	1.00
35	ATOM 17.04	2414	O	TRP	477	14.498	63.369	70.825	1.00
	ATOM 18.53	2415	N	LYS	478	13.280	61.974	69.572	1.00
40	ATOM 17.79	2417	CA	LYS	478	12.302	63.005	69.296	1.00
	ATOM 18.06	2418	CB	LYS	478	11.276	62.549	68.282	1.00
	ATOM 17.26	2419	CG	LYS	478	11.831	62.577	66.881	1.00
45	ATOM 19.20	2420	CD	LYS	478	10.816	62.102	65.915	1.00
	ATOM 22.29	2421	CE	LYS	478	11.309	62.303	64.503	1.00
50	ATOM 27.75	2422	NZ	LYS	478	11.573	63.737	64.240	1.00
	ATOM 18.94	2426	C	LYS	478	11.615	63.452	70.576	1.00
	ATOM 19.46	2427	O	LYS	478	11.429	62.677	71.516	1.00
55	ATOM 19.78	2428	N	GLU	479	11.319	64.743	70.658	1.00
	ATOM 22.45	2430	CA	GLU	479	10.695	65.284	71.852	1.00

	ATOM 27.45	2431	CB	GLU	479	10.434	66.767	71.627	1.00
	ATOM 33.27	2432	CG	GLU	479	9.843	67.518	72.816	1.00
5	ATOM 38.31	2433	CD	GLU	479	10.791	67.878	73.971	1.00
	ATOM 44.43	2434	OE1	GLU	479	12.044	67.900	73.903	1.00
10	ATOM 39.74	2435	OE2	GLU	479	10.187	68.204	75.002	1.00
	ATOM 22.57	2436	C	GLU	479	9.394	64.549	72.287	1.00
	ATOM 21.17	2437	O	GLU	479	9.264	64.065	73.415	1.00
15	ATOM 21.63	2438	N	ARG	480	8.427	64.469	71.387	1.00
	ATOM 25.32	2440	CA	ARG	480	7.194	63.785	71.746	1.00
20	ATOM 27.02	2441	CB	ARG	480	6.053	64.222	70.837	1.00
	ATOM 34.66	2442	CG	ARG	480	5.329	65.427	71.242	1.00
	ATOM 35.70	2443	CD	ARG	480	4.500	65.812	70.100	1.00
25	ATOM 41.57	2444	NE	ARG	480	4.865	65.561	68.688	1.00
	ATOM 43.95	2446	CZ	ARG	480	3.848	65.369	67.862	1.00
30	ATOM 46.80	2447	NH1	ARG	480	2.706	65.400	68.498	1.00
	ATOM 43.75	2450	NH2	ARG	480	3.857	65.388	66.521	1.00
	ATOM 22.03	2453	C	ARG	480	7.361	62.274	71.585	1.00
35	ATOM 21.78	2454	O	ARG	480	7.707	61.799	70.526	1.00
	ATOM 20.56	2455	N	PRO	481	7.088	61.510	72.641	1.00
40	ATOM 19.52	2456	CD	PRO	481	6.601	61.978	73.953	1.00
	ATOM 20.01	2457	CA	PRO	481	7.203	60.043	72.606	1.00
	ATOM 19.09	2458	CB	PRO	481	6.566	59.619	73.916	1.00
45	ATOM 18.91	2459	CG	PRO	481	6.859	60.763	74.832	1.00
	ATOM 22.36	2460	C	PRO	481	6.489	59.426	71.414	1.00
50	ATOM 24.56	2461	O	PRO	481	7.057	58.599	70.701	1.00
	ATOM 23.76	2462	N	GLU	482	5.289	59.920	71.100	1.00
	ATOM 22.80	2464	CA	GLU	482	4.527	59.365	69.977	1.00
55	ATOM 26.56	2465	CB	GLU	482	3.101	59.928	69.970	1.00
	ATOM 34.44	2466	CG	GLU	482	3.088	61.434	69.770	1.00

	ATOM 37.15	2467	CD	GLU	482	2.854	62.240	71.068	1.00
	ATOM 32.95	2468	OE1	GLU	482	3.373	61.884	72.176	1.00
5	ATOM 44.38	2469	OE2	GLU	482	2.104	63.231	70.949	1.00
	ATOM 20.97	2470	C	GLU	482	5.182	59.557	68.626	1.00
10	ATOM 20.58	2471	O	GLU	482	4.835	58.870	67.667	1.00
	ATOM 20.69	2472	N	ASP	483	6.108	60.502	68.520	1.00
	ATOM 17.73	2474	CA	ASP	483	6.810	60.707	67.247	1.00
15	ATOM 21.92	2475	CB	ASP	483	7.313	62.132	67.113	1.00
	ATOM 23.99	2476	CG	ASP	483	6.201	63.123	66.952	1.00
20	ATOM 26.48	2477	OD1	ASP	483	5.090	62.749	66.535	1.00
	ATOM 26.05	2478	OD2	ASP	483	6.476	64.279	67.256	1.00
	ATOM 16.37	2479	C	ASP	483	7.994	59.779	67.074	1.00
25	ATOM 13.59	2480	O	ASP	483	8.529	59.663	65.984	1.00
	ATOM 16.89	2481	N	ARG	484	8.409	59.133	68.151	1.00
30	ATOM 17.09	2483	CA	ARG	484	9.556	58.206	68.083	1.00
	ATOM 13.85	2484	CB	ARG	484	10.054	57.871	69.488	1.00
	ATOM 11.02	2485	CG	ARG	484	10.487	59.103	70.255	1.00
35	ATOM 12.58	2486	CD	ARG	484	10.824	58.769	71.676	1.00
	ATOM 14.20	2487	NE	ARG	484	10.898	59.984	72.449	1.00
40	ATOM 21.54	2489	CZ	ARG	484	10.673	60.073	73.746	1.00
	ATOM 20.98	2490	NH1	ARG	484	10.373	58.989	74.443	1.00
	ATOM 23.02	2493	NH2	ARG	484	10.632	61.286	74.357	1.00
45	ATOM 19.02	2496	C	ARG	484	9.079	56.942	67.337	1.00
	ATOM 20.65	2497	O	ARG	484	7.918	56.565	67.419	1.00
50	ATOM 17.88	2498	N	PRO	485	9.981	56.307	66.584	1.00
	ATOM 17.09	2499	CD	PRO	485	11.424	56.601	66.551	1.00
	ATOM 16.95	2500	CA	PRO	485	9.680	55.098	65.809	1.00
55	ATOM 15.97	2501	CB	PRO	485	10.935	54.941	64.982	1.00
	ATOM 14.91	2502	CG	PRO	485	12.002	55.366	65.916	1.00

	ATOM 15.71	2503	C	PRO	485	9.387	53.845	66.653	1.00
	ATOM 14.43	2504	O	PRO	485	9.619	53.806	67.838	1.00
5	ATOM 16.25	2505	N	THR	486	8.768	52.861	66.025	1.00
	ATOM 17.14	2507	CA	THR	486	8.504	51.581	66.722	1.00
10	ATOM 16.41	2508	CB	THR	486	7.417	50.779	66.033	1.00
	ATOM 16.20	2509	OG1	THR	486	7.829	50.507	64.693	1.00
	ATOM 15.66	2511	CG2	THR	486	6.058	51.558	66.000	1.00
15	ATOM 16.65	2512	C	THR	486	9.779	50.747	66.664	1.00
	ATOM 17.35	2513	O	THR	486	10.647	50.987	65.824	1.00
20	ATOM 16.93	2514	N	PHE	487	9.891	49.752	67.531	1.00
	ATOM 15.50	2516	CA	PHE	487	11.080	48.887	67.487	1.00
	ATOM 12.76	2517	CB	PHE	487	11.174	48.036	68.741	1.00
25	ATOM 12.18	2518	CG	PHE	487	11.758	48.741	69.884	1.00
	ATOM 11.67	2519	CD1	PHE	487	13.138	49.069	69.879	1.00
30	ATOM 12.34	2520	CD2	PHE	487	10.987	49.065	70.985	1.00
	ATOM 12.23	2521	CE1	PHE	487	13.709	49.708	70.975	1.00
	ATOM 13.42	2522	CE2	PHE	487	11.552	49.727	72.097	1.00
35	ATOM 12.97	2523	CZ	PHE	487	12.937	50.044	72.075	1.00
	ATOM 17.36	2524	C	PHE	487	11.076	48.043	66.241	1.00
40	ATOM 18.27	2525	O	PHE	487	12.130	47.704	65.711	1.00
	ATOM 19.57	2526	N	ASP	488	9.905	47.728	65.719	1.00
	ATOM 20.13	2528	CA	ASP	488	9.892	46.945	64.483	1.00
45	ATOM 24.27	2529	CB	ASP	488	8.470	46.499	64.106	1.00
	ATOM 29.59	2530	CG	ASP	488	8.496	45.499	62.992	1.00
50	ATOM 36.24	2531	OD1	ASP	488	9.131	44.444	63.191	1.00
	ATOM 33.69	2532	OD2	ASP	488	7.964	45.752	61.907	1.00
	ATOM 18.94	2533	C	ASP	488	10.488	47.784	63.346	1.00
55	ATOM 16.23	2534	O	ASP	488	11.215	47.273	62.444	1.00
	ATOM 17.75	2535	N	TYR	489	10.150	49.082	63.347	1.00

	ATOM 17.95	2537	CA	TYR	489	10.712	49.989	62.324	1.00
	ATOM 17.00	2538	CB	TYR	489	10.131	51.399	62.490	1.00
5	ATOM 15.28	2539	CG	TYR	489	10.784	52.406	61.612	1.00
	ATOM 14.83	2540	CD1	TYR	489	10.356	52.584	60.313	1.00
10	ATOM 15.97	2541	CE1	TYR	489	10.989	53.458	59.479	1.00
	ATOM 15.71	2542	CD2	TYR	489	11.877	53.158	62.063	1.00
	ATOM 14.92	2543	CE2	TYR	489	12.511	54.063	61.209	1.00
15	ATOM 15.91	2544	CZ	TYR	489	12.065	54.201	59.929	1.00
	ATOM 17.58	2545	OH	TYR	489	12.646	55.117	59.055	1.00
20	ATOM 16.42	2547	C	TYR	489	12.258	50.052	62.496	1.00
	ATOM 15.86	2548	O	TYR	489	13.005	50.000	61.532	1.00
	ATOM 16.20	2549	N	LEU	490	12.702	50.223	63.726	1.00
25	ATOM 17.33	2551	CA	LEU	490	14.130	50.318	63.992	1.00
	ATOM 15.71	2552	CB	LEU	490	14.357	50.563	65.480	1.00
30	ATOM 18.53	2553	CG	LEU	490	13.988	51.980	65.957	1.00
	ATOM 13.48	2554	CD1	LEU	490	13.929	52.008	67.486	1.00
	ATOM 13.64	2555	CD2	LEU	490	15.081	52.997	65.466	1.00
35	ATOM 17.72	2556	C	LEU	490	14.848	49.036	63.546	1.00
	ATOM 17.65	2557	O	LEU	490	15.904	49.116	62.933	1.00
40	ATOM 18.78	2558	N	ARG	491	14.249	47.881	63.824	1.00
	ATOM 17.34	2560	CA	ARG	491	14.840	46.616	63.419	1.00
	ATOM 17.59	2561	CB	ARG	491	13.982	45.428	63.875	1.00
45	ATOM 24.17	2562	CG	ARG	491	14.540	44.136	63.232	1.00
	ATOM 22.99	2563	CD	ARG	491	13.523	43.026	63.167	1.00
50	ATOM 25.56	2564	NE	ARG	491	12.284	43.481	62.543	1.00
	ATOM 22.13	2566	CZ	ARG	491	12.064	43.567	61.239	1.00
	ATOM 20.13	2567	NH1	ARG	491	12.999	43.225	60.371	1.00
55	ATOM 22.56	2570	NH2	ARG	491	10.894	44.032	60.802	1.00
	ATOM 15.82	2573	C	ARG	491	14.987	46.543	61.911	1.00

	ATOM 17.69	2574	O	ARG	491	16.047	46.194	61.391	1.00
	ATOM 14.44	2575	N	SER	492	13.929	46.895	61.201	0.71
5	ATOM 12.85	2577	CA	SER	492	13.948	46.832	59.751	0.71
	ATOM 10.21	2578	CB	SER	492	12.560	47.197	59.208	0.71
10	ATOM 13.48	2579	OG	SER	492	12.535	47.140	57.800	0.71
	ATOM 12.75	2581	C	SER	492	15.009	47.747	59.152	0.71
	ATOM 12.67	2582	O	SER	492	15.688	47.387	58.208	0.71
15	ATOM 15.45	2583	N	VAL	493	15.128	48.946	59.687	1.00
	ATOM 15.94	2585	CA	VAL	493	16.101	49.895	59.178	1.00
20	ATOM 18.03	2586	CB	VAL	493	15.912	51.314	59.829	1.00
	ATOM 15.50	2587	CG1	VAL	493	17.062	52.223	59.447	1.00
	ATOM 14.02	2588	CG2	VAL	493	14.587	51.931	59.354	1.00
25	ATOM 12.14	2589	C	VAL	493	17.520	49.389	59.452	1.00
	ATOM 11.76	2590	O	VAL	493	18.341	49.419	58.586	1.00
30	ATOM 13.03	2591	N	LEU	494	17.766	48.933	60.667	1.00
	ATOM 14.71	2593	CA	LEU	494	19.086	48.432	61.028	1.00
	ATOM 10.71	2594	CB	LEU	494	19.157	48.159	62.520	1.00
35	ATOM 8.89	2595	CG	LEU	494	19.173	49.410	63.390	1.00
	ATOM 2.00	2596	CD1	LEU	494	18.912	49.063	64.858	1.00
40	ATOM 12.44	2597	CD2	LEU	494	20.551	50.101	63.290	1.00
	ATOM 17.11	2598	C	LEU	494	19.502	47.218	60.180	1.00
	ATOM 16.73	2599	O	LEU	494	20.666	47.111	59.803	1.00
45	ATOM 20.35	2600	N	GLU	495	18.559	46.339	59.844	1.00
	ATOM 21.31	2602	CA	GLU	495	18.876	45.198	58.999	1.00
50	ATOM 23.20	2603	CB	GLU	495	17.669	44.245	58.899	1.00
	ATOM 25.30	2604	CG	GLU	495	17.373	43.530	60.206	1.00
	ATOM 27.48	2605	CD	GLU	495	16.180	42.595	60.127	1.00
55	ATOM 29.73	2606	OE1	GLU	495	15.434	42.595	59.123	1.00
	ATOM 31.46	2607	OE2	GLU	495	15.960	41.852	61.083	1.00



	ATOM	2608	C	GLU	495	19.270	45.711	57.611	1.00
	22.77								
	ATOM	2609	O	GLU	495	20.174	45.168	56.954	1.00
	22.87								
5	ATOM	2610	N	ASP	496	18.574	46.740	57.126	1.00
	22.86								
	ATOM	2612	CA	ASP	496	18.915	47.313	55.831	1.00
	22.17								
10	ATOM	2613	CB	ASP	496	17.885	48.377	55.400	1.00
	23.72								
	ATOM	2614	CG	ASP	496	16.620	47.773	54.828	1.00
	24.62								
	ATOM	2615	OD1	ASP	496	16.584	46.547	54.539	1.00
	27.54								
15	ATOM	2616	OD2	ASP	496	15.644	48.526	54.664	1.00
	23.63								
	ATOM	2617	C	ASP	496	20.303	47.935	55.898	1.00
	20.74								
	ATOM	2618	O	ASP	496	21.034	47.881	54.941	1.00
	20.45								
20	ATOM	2619	N	PHE	497	20.653	48.551	57.031	1.00
	22.83								
	ATOM	2621	CA	PHE	497	21.990	49.160	57.185	1.00
	23.54								
25	ATOM	2622	CB	PHE	497	22.107	49.907	58.534	1.00
	22.41								
	ATOM	2623	CG	PHE	497	21.396	51.257	58.593	1.00
	19.41								
	ATOM	2624	CD1	PHE	497	20.699	51.789	57.504	1.00
	16.87								
30	ATOM	2625	CD2	PHE	497	21.446	51.973	59.761	1.00
	17.79								
	ATOM	2626	CE1	PHE	497	20.042	53.066	57.611	1.00
	15.59								
35	ATOM	2627	CE2	PHE	497	20.808	53.213	59.883	1.00
	16.89								
	ATOM	2628	CZ	PHE	497	20.107	53.751	58.799	1.00
	15.28								
	ATOM	2629	C	PHE	497	23.144	48.119	57.079	1.00
	26.43								
40	ATOM	2630	O	PHE	497	24.132	48.361	56.405	1.00
	24.05								
	ATOM	2631	N	PHE	498	22.995	46.993	57.786	1.00
	31.81								
45	ATOM	2633	CA	PHE	498	23.937	45.847	57.839	1.00
	34.53								
	ATOM	2634	CB	PHE	498	23.410	44.895	58.970	1.00
	38.33								
	ATOM	2635	CG	PHE	498	23.812	43.440	58.870	1.00
	42.97								
50	ATOM	2636	CD1	PHE	498	25.128	43.061	58.962	1.00
	44.23								
	ATOM	2637	CD2	PHE	498	22.841	42.441	58.808	1.00
	45.57								
55	ATOM	2638	CE1	PHE	498	25.494	41.718	59.002	1.00
	45.32								
	ATOM	2639	CE2	PHE	498	23.194	41.084	58.846	1.00
	45.40								

	ATOM	2640	CZ	PHE	498	24.536	40.728	58.947	1.00
	45.26								
	ATOM	2641	C	PHE	498	23.986	45.174	56.452	1.00
	34.71								
5	ATOM	2642	O	PHE	498	25.078	44.797	55.999	1.00
	34.04								
	ATOM	2643	N	THR	499	22.861	45.066	55.747	1.00
	36.17								
10	ATOM	2645	CA	THR	499	22.929	44.395	54.446	1.00
	39.53								
	ATOM	2646	CB	THR	499	21.599	43.788	53.879	1.00
	38.32								
	ATOM	2647	OG1	THR	499	20.731	44.827	53.457	1.00
	40.33								
15	ATOM	2649	CG2	THR	499	20.883	42.893	54.883	1.00
	38.45								
	ATOM	2650	C	THR	499	23.610	45.230	53.394	1.00
	42.57								
	ATOM	2651	O	THR	499	24.254	44.701	52.499	1.00
	45.02								
20	ATOM	2652	N	ALA	500	23.561	46.542	53.566	1.00
	46.24								
	ATOM	2654	CA	ALA	500	24.251	47.406	52.624	1.00
	48.43								
25	ATOM	2655	CB	ALA	500	23.704	48.821	52.716	1.00
	48.43								
	ATOM	2656	C	ALA	500	25.755	47.359	52.979	1.00
	48.93								
	ATOM	2657	O	ALA	500	26.588	47.243	52.081	1.00
	51.02								
30	ATOM	2658	N	THR	501	26.087	47.447	54.280	1.00
	49.00								
	ATOM	2660	CA	THR	501	27.489	47.375	54.745	1.00
	50.41								
35	ATOM	2661	CB	THR	501	27.729	47.812	56.242	1.00
	50.29								
	ATOM	2662	OG1	THR	501	27.170	46.843	57.145	1.00
	51.73								
40	ATOM	2664	CG2	THR	501	27.211	49.187	56.529	1.00
	48.41								
	ATOM	2665	C	THR	501	28.051	45.942	54.648	1.00
	51.23								
	ATOM	2666	O	THR	501	27.291	45.008	54.304	1.00
	50.34								
45	ATOM	2667	OT	THR	501	29.271	45.796	54.838	1.00
	53.71								
	ATOM	2668	S	SO4	901	20.240	32.671	68.950	1.00
	20.54								
	ATOM	2669	O1	SO4	901	20.164	32.039	70.208	1.00
	18.75								
50	ATOM	2670	O2	SO4	901	18.884	33.001	68.524	1.00
	21.22								
	ATOM	2671	O3	SO4	901	21.012	33.903	69.104	1.00
	22.65								
55	ATOM	2672	O4	SO4	901	20.810	31.783	68.019	1.00
	20.07								
	ATOM	2673	PA	ANP	1	25.168	41.602	88.040	1.00
	59.70								

	ATOM	2674	O1A ANP	1	25.690	41.585	89.452	1.00
	62.05							
	ATOM	2675	O2A ANP	1	23.870	40.964	87.774	1.00
	60.10							
5	ATOM	2676	O5' ANP	1	26.271	40.936	87.075	1.00
	55.58							
	ATOM	2677	O3A ANP	1	25.238	43.072	87.395	1.00
	58.85							
10	ATOM	2678	C5' ANP	1	27.126	39.813	87.313	1.00
	47.85							
	ATOM	2679	C4' ANP	1	27.811	39.435	85.961	1.00
	42.19							
	ATOM	2680	O4' ANP	1	27.328	38.181	85.485	1.00
	39.82							
15	ATOM	2681	C1' ANP	1	27.393	38.245	84.067	1.00
	34.30							
	ATOM	2682	N9 ANP	1	26.168	37.720	83.671	1.00
	29.49							
20	ATOM	2683	C4 ANP	1	25.987	36.620	82.839	1.00
	27.56							
	ATOM	2684	N3 ANP	1	26.971	35.962	82.079	1.00
	25.59							
	ATOM	2685	C2 ANP	1	26.430	34.902	81.461	1.00
	25.56							
25	ATOM	2686	N1 ANP	1	25.142	34.566	81.317	1.00
	22.28							
	ATOM	2687	C6 ANP	1	24.205	35.236	82.032	1.00
	24.41							
30	ATOM	2688	N6 ANP	1	22.887	34.873	81.858	1.00
	23.00							
	ATOM	2689	C5 ANP	1	24.642	36.296	82.892	1.00
	27.32							
	ATOM	2690	N7 ANP	1	23.958	37.069	83.756	1.00
	27.18							
35	ATOM	2691	C8 ANP	1	24.888	37.892	84.271	1.00
	29.52							
	ATOM	2692	C2' ANP	1	27.365	39.606	83.480	1.00
	37.32							
40	ATOM	2693	O2' ANP	1	27.402	39.564	81.930	1.00
	37.60							
	ATOM	2694	C3' ANP	1	28.466	39.860	84.536	1.00
	41.10							
	ATOM	2695	O3' ANP	1	29.648	40.806	84.396	1.00
	40.76							
45	ATOM	2696	OH2 TIP	1	21.636	29.682	74.788	1.00
	24.70							
	ATOM	2699	OH2 TIP	2	19.421	27.894	78.845	1.00
	15.80							
50	ATOM	2702	OH2 TIP	3	14.819	51.729	79.254	1.00
	11.50							
	ATOM	2705	OH2 TIP	4	19.432	60.733	77.592	1.00
	22.33							
	ATOM	2708	OH2 TIP	5	20.635	62.747	73.259	1.00
	21.30							
55	ATOM	2711	OH2 TIP	6	16.552	32.841	74.619	1.00
	25.56							
	ATOM	2714	OH2 TIP	7	24.548	68.842	70.700	1.00
	20.10							

	ATOM 13.20	2717	OH2 TIP	8	3.895	16.823	94.898	1.00
	ATOM 27.65	2720	OH2 TIP	9	18.109	61.908	79.708	1.00
5	ATOM 20.90	2723	OH2 TIP	10	16.726	62.080	62.427	1.00
	ATOM 19.51	2726	OH2 TIP	11	25.219	50.449	80.027	1.00
10	ATOM 13.82	2729	OH2 TIP	12	26.686	31.635	75.090	1.00
	ATOM 26.96	2732	OH2 TIP	13	25.361	21.684	76.987	1.00
	ATOM 22.21	2735	OH2 TIP	14	3.847	51.668	76.148	1.00
15	ATOM 32.58	2738	OH2 TIP	15	33.052	40.009	77.678	1.00
	ATOM 29.80	2741	OH2 TIP	16	23.215	20.551	78.038	1.00
20	ATOM 34.59	2744	OH2 TIP	17	7.654	54.028	63.788	1.00
	ATOM 22.00	2747	OH2 TIP	18	28.141	56.263	74.474	1.00
	ATOM 26.18	2750	OH2 TIP	19	22.179	18.839	82.211	1.00
25	ATOM 22.45	2753	OH2 TIP	20	13.275	34.109	76.607	1.00
	ATOM 22.43	2756	OH2 TIP	21	7.198	57.427	104.428	1.00
30	ATOM 33.94	2759	OH2 TIP	22	35.735	44.087	79.480	1.00
	ATOM 24.56	2762	OH2 TIP	23	8.540	65.595	69.023	1.00
	ATOM 22.91	2765	OH2 TIP	24	22.270	28.066	79.324	1.00
35	ATOM 31.41	2768	OH2 TIP	25	14.107	69.026	73.845	1.00
	ATOM 22.90	2771	OH2 TIP	26	13.696	55.586	79.458	1.00
40	ATOM 45.29	2774	OH2 TIP	27	4.349	54.682	67.141	1.00
	ATOM 43.31	2777	OH2 TIP	28	6.680	45.227	67.941	1.00
	ATOM 17.34	2780	OH2 TIP	29	24.714	78.648	73.916	1.00
45	ATOM 29.23	2783	OH2 TIP	30	30.134	59.806	72.383	1.00
	ATOM 21.36	2786	OH2 TIP	31	26.035	23.821	78.463	1.00
50	ATOM 28.45	2789	OH2 TIP	32	3.066	56.997	68.078	1.00
	ATOM 23.35	2792	OH2 TIP	33	6.610	51.972	70.152	1.00
	ATOM 36.32	2795	OH2 TIP	34	26.470	70.439	71.773	1.00
55	ATOM 23.00	2798	OH2 TIP	35	30.259	41.069	81.623	1.00
	ATOM 42.40	2801	OH2 TIP	36	13.095	71.374	72.576	1.00

	ATOM	2804	OH2 TIP	37	29.729	18.036	80.754	1.00
	33.66							
	ATOM	2807	OH2 TIP	38	36.082	38.615	74.443	1.00
	37.20							
5	ATOM	2810	OH2 TIP	39	29.667	65.962	75.095	1.00
	56.18							
	ATOM	2813	OH2 TIP	40	16.535	52.578	84.855	1.00
	32.05							
10	ATOM	2816	OH2 TIP	41	4.169	43.760	85.732	1.00
	30.89							
	ATOM	2819	OH2 TIP	42	29.884	58.322	74.618	1.00
	17.65							
	ATOM	2822	OH2 TIP	43	15.951	20.096	79.975	1.00
	25.65							
15	ATOM	2825	OH2 TIP	44	4.646	47.648	75.172	1.00
	35.85							
	ATOM	2828	OH2 TIP	45	15.058	76.771	76.303	1.00
	30.45							
20	ATOM	2831	OH2 TIP	46	6.244	59.942	101.309	1.00
	35.15							
	ATOM	2834	OH2 TIP	47	14.040	45.715	83.639	1.00
	18.86							
	ATOM	2837	OH2 TIP	48	14.202	25.165	81.284	1.00
	34.29							
25	ATOM	2840	OH2 TIP	49	10.663	40.652	67.185	1.00
	26.39							
	ATOM	2843	OH2 TIP	50	33.301	41.942	62.513	1.00
	35.25							
30	ATOM	2846	OH2 TIP	51	6.527	57.868	77.114	1.00
	53.32							
	ATOM	2849	OH2 TIP	52	17.044	28.731	80.298	1.00
	36.84							
	ATOM	2852	OH2 TIP	53	6.062	57.571	65.730	1.00
	30.27							
35	ATOM	2855	OH2 TIP	54	17.822	52.756	80.733	1.00
	34.91							
	ATOM	2858	OH2 TIP	55	11.552	33.271	69.618	1.00
	32.40							
40	ATOM	2861	OH2 TIP	56	12.856	35.833	79.201	1.00
	22.14							
	ATOM	2864	OH2 TIP	57	40.066	43.507	77.613	1.00
	50.14							
	ATOM	2867	OH2 TIP	58	2.995	17.966	92.504	1.00
	37.28							
45	ATOM	2870	OH2 TIP	59	13.311	23.566	95.035	1.00
	47.12							
	ATOM	2873	OH2 TIP	60	11.795	37.974	66.135	1.00
	36.11							
	ATOM	2876	OH2 TIP	61	24.504	67.408	74.469	1.00
50	35.25							
	ATOM	2879	OH2 TIP	62	43.357	40.085	77.338	1.00
	51.90							
	ATOM	2882	OH2 TIP	63	1.393	21.671	100.291	1.00
	33.39							
55	ATOM	2885	OH2 TIP	64	11.280	66.450	68.597	1.00
	31.52							
	ATOM	2888	OH2 TIP	65	4.661	48.407	66.893	1.00
	31.00							

	ATOM	2891	OH2 TIP	66	23.517	29.080	77.018	1.00
	31.18							
	ATOM	2894	OH2 TIP	67	13.747	73.842	73.889	1.00
	26.91							
5	ATOM	2897	OH2 TIP	68	15.378	54.181	81.664	1.00
	19.28							
	ATOM	2900	OH2 TIP	69	35.556	54.625	72.574	1.00
	56.78							
10	ATOM	2903	OH2 TIP	70	25.738	53.333	58.018	1.00
	44.39							
	ATOM	2906	OH2 TIP	71	14.505	45.522	57.007	1.00
	52.07							
	ATOM	2909	OH2 TIP	72	9.631	42.340	87.085	1.00
	47.28							
15	ATOM	2912	OH2 TIP	73	24.646	26.338	78.448	1.00
	50.23							
	ATOM	2915	OH2 TIP	74	17.613	34.219	99.904	1.00
	41.24							
20	ATOM	2918	OH2 TIP	75	31.787	33.945	97.250	1.00
	76.43							
	ATOM	2921	OH2 TIP	76	29.710	33.429	98.446	1.00
	67.00							
	ATOM	2924	OH2 TIP	77	26.300	72.730	70.717	1.00
	25.94							
25	ATOM	2927	OH2 TIP	78	11.976	33.414	80.103	1.00
	24.71							
	ATOM	2930	OH2 TIP	79	29.259	62.469	72.136	1.00
	30.42							
30	ATOM	2933	OH2 TIP	80	26.839	65.527	74.362	1.00
	40.02							
	ATOM	2936	OH2 TIP	81	27.257	19.893	78.082	1.00
	32.57							
	ATOM	2939	OH2 TIP	82	29.912	36.264	82.030	1.00
	41.11							
35	ATOM	2942	OH2 TIP	84	18.856	52.421	83.223	1.00
	30.89							
	ATOM	2945	OH2 TIP	85	27.449	24.537	94.644	1.00
	62.62							
40	ATOM	2948	OH2 TIP	86	-1.546	21.109	100.288	1.00
	51.77							
	ATOM	2951	OH2 TIP	87	15.729	35.403	101.377	1.00
	39.68							
	ATOM	2954	OH2 TIP	88	34.403	37.880	76.403	1.00
	28.62							
45	ATOM	2957	OH2 TIP	89	24.265	74.217	76.897	1.00
	33.70							
	ATOM	2960	OH2 TIP	90	13.249	22.449	79.551	1.00
	32.00							
50	ATOM	2963	OH2 TIP	91	9.902	52.146	79.592	1.00
	40.91							
	ATOM	2966	OH2 TIP	92	20.101	71.150	85.234	1.00
	42.55							
	ATOM	2969	OH2 TIP	93	4.608	59.409	77.922	1.00
	43.45							
55	ATOM	2972	OH2 TIP	94	10.440	59.077	64.328	1.00
	40.61							
	ATOM	2975	OH2 TIP	95	17.443	51.837	87.380	1.00
	44.75							

	ATOM 32.29	2978	OH2 TIP	96	14.747	19.195	88.163	1.00
	ATOM 68.73	2981	OH2 TIP	98	22.641	31.842	72.909	1.00
5	ATOM 35.14	2984	OH2 TIP	99	16.410	46.201	86.092	1.00
	ATOM 53.13	2987	OH2 TIP	100	32.717	59.893	71.213	1.00
10	ATOM 36.54	2990	OH2 TIP	101	12.529	44.995	98.969	1.00
	ATOM 36.81	2993	OH2 TIP	102	15.282	38.471	102.107	1.00
	ATOM 36.76	2996	OH2 TIP	103	-1.910	21.152	94.291	1.00
15	ATOM 37.19	2999	OH2 TIP	104	23.386	43.084	94.045	1.00
	ATOM 54.05	3002	OH2 TIP	105	24.169	18.508	94.575	1.00
20	ATOM 62.31	3005	OH2 TIP	106	32.547	63.480	69.339	1.00
	ATOM 36.53	3008	OH2 TIP	107	32.770	33.673	71.653	1.00
	ATOM 48.22	3011	OH2 TIP	108	6.133	39.983	88.066	1.00
25	ATOM 52.79	3014	OH2 TIP	109	27.593	29.189	75.515	1.00
	ATOM 32.03	3017	OH2 TIP	110	34.714	32.216	91.918	1.00
30	ATOM 47.91	3020	OH2 TIP	111	5.948	50.113	63.208	1.00
	ATOM 58.25	3023	OH2 TIP	112	7.211	28.277	92.069	1.00
	ATOM 65.10	3026	OH2 TIP	113	4.659	62.123	78.278	1.00
35	ATOM 45.95	3029	OH2 TIP	114	12.092	21.414	95.200	1.00
	ATOM 54.02	3032	OH2 TIP	115	-5.762	20.102	93.377	1.00
40	ATOM 48.95	3035	OH2 TIP	116	34.368	49.023	60.476	1.00
	ATOM 50.11	3038	OH2 TIP	117	15.264	39.756	90.933	1.00
	ATOM 35.15	3041	OH2 TIP	118	20.473	34.315	86.628	1.00
45	ATOM 42.72	3044	OH2 TIP	119	12.962	30.648	72.355	1.00
	ATOM 60.04	3047	OH2 TIP	120	29.284	70.894	70.767	1.00
50	ATOM 47.46	3050	OH2 TIP	121	6.144	34.703	75.934	1.00
	ATOM 62.56	3053	OH2 TIP	122	26.483	74.969	74.981	1.00
	ATOM 42.80	3056	OH2 TIP	123	40.678	38.708	69.386	1.00
55	ATOM 35.33	3059	OH2 TIP	124	18.287	74.826	79.516	1.00
	ATOM 45.47	3062	OH2 TIP	125	24.227	25.786	95.606	1.00

	ATOM	3065	OH2 TIP	126	26.975	26.962	73.533	1.00
	31.23							
	ATOM	3068	OH2 TIP	127	34.377	35.809	70.653	1.00
	42.79							
5	ATOM	3071	OH2 TIP	128	9.420	66.131	80.020	1.00
	41.85							
	ATOM	3074	OH2 TIP	129	5.913	42.023	93.982	1.00
	37.93							

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Table 3  
Coordinates of Lck bound with AMP-PNP

5	B	Atom				X	Y	Z	Occ
		Type	Res	#					
10	ATOM 21.34	1 CB	LYS	231		1.385	26.773	89.461	1.00
	ATOM 21.51	2 CG	LYS	231		0.537	26.769	88.245	1.00
	ATOM 23.65	3 CD	LYS	231		1.065	25.734	87.277	1.00
15	ATOM 23.61	4 CE	LYS	231		0.120	25.565	86.108	1.00
	ATOM 25.65	5 NZ	LYS	231		0.728	24.648	85.080	1.00
	ATOM 0.00	6 HZ1	LYS	231		0.915	23.722	85.493	1.00
20	ATOM 0.00	7 HZ2	LYS	231		1.620	25.071	84.742	1.00
	ATOM 0.00	8 HZ3	LYS	231		0.075	24.561	84.274	1.00
	ATOM 19.85	9 C	LYS	231		1.988	27.638	91.652	1.00
25	ATOM 20.43	10 O	LYS	231		3.059	28.227	91.744	1.00
	ATOM 0.00	11 HT1	LYS	231		2.338	29.252	89.546	1.00
	ATOM 0.00	12 HT2	LYS	231		1.183	29.956	90.579	1.00
30	ATOM 20.87	13 N	LYS	231		1.355	29.219	89.879	1.00
	ATOM 0.00	14 HT3	LYS	231		0.717	29.358	89.057	1.00
	ATOM 20.91	15 CA	LYS	231		1.088	27.870	90.472	1.00
35	ATOM 18.80	16 N	PRO	232		1.597	26.726	92.561	1.00
	ATOM 18.99	17 CD	PRO	232		0.390	25.885	92.560	1.00
	ATOM 17.40	18 CA	PRO	232		2.435	26.437	93.733	1.00
40	ATOM 18.29	19 CB	PRO	232		1.579	25.470	94.538	1.00
	ATOM 19.28	20 CG	PRO	232		0.814	24.761	93.509	1.00
	ATOM 15.67	21 C	PRO	232		3.705	25.766	93.253	1.00
45	ATOM 15.72	22 O	PRO	232		3.737	25.184	92.178	1.00
	ATOM 15.43	23 N	TRP	233		4.744	25.851	94.063	1.00
	ATOM 0.00	24 H	TRP	233		4.653	26.278	94.938	1.00
50	ATOM 14.16	25 CA	TRP	233		6.049	25.336	93.653	1.00

	ATOM 13.93	26	CB	TRP	233	7.123	25.646	94.713	1.00
	ATOM 13.67	27	CG	TRP	233	6.954	24.883	96.024	1.00
5	ATOM 13.44	28	CD2	TRP	233	7.354	23.532	96.282	1.00
	ATOM 13.68	29	CE2	TRP	233	7.057	23.264	97.626	1.00
10	ATOM 13.97	30	CE3	TRP	233	7.945	22.518	95.485	1.00
	ATOM 13.30	31	CD1	TRP	233	6.443	25.356	97.181	1.00
	ATOM 12.97	32	NE1	TRP	233	6.510	24.402	98.161	1.00
15	ATOM 0.00	33	HE1	TRP	233	6.237	24.512	99.089	1.00
	ATOM 12.53	34	CZ2	TRP	233	7.313	22.031	98.220	1.00
20	ATOM 12.04	35	CZ3	TRP	233	8.207	21.261	96.095	1.00
	ATOM 12.52	36	CH2	TRP	233	7.884	21.044	97.449	1.00
	ATOM 14.34	37	C	TRP	233	6.030	23.858	93.280	1.00
25	ATOM 13.58	38	O	TRP	233	6.738	23.462	92.380	1.00
	ATOM 13.99	39	N	TRP	234	5.163	23.064	93.912	1.00
30	ATOM 0.00	40	H	TRP	234	4.556	23.452	94.570	1.00
	ATOM 14.92	41	CA	TRP	234	5.112	21.632	93.603	1.00
	ATOM 13.19	42	CB	TRP	234	4.507	20.854	94.790	1.00
35	ATOM 12.51	43	CG	TRP	234	3.124	21.289	95.147	1.00
	ATOM 12.55	44	CD2	TRP	234	2.755	22.231	96.158	1.00
40	ATOM 13.35	45	CE2	TRP	234	1.346	22.370	96.127	1.00
	ATOM 14.36	46	CE3	TRP	234	3.488	22.980	97.079	1.00
	ATOM 12.11	47	CD1	TRP	234	1.938	20.883	94.555	1.00
45	ATOM 11.94	48	NE1	TRP	234	0.874	21.538	95.149	1.00
	ATOM 0.00	49	HE1	TRP	234	-0.056	21.431	94.898	1.00
50	ATOM 13.79	50	CZ2	TRP	234	0.644	23.231	96.982	1.00
	ATOM 16.07	51	CZ3	TRP	234	2.786	23.866	97.946	1.00
	ATOM 16.13	52	CH2	TRP	234	1.373	23.975	97.886	1.00
55	ATOM 15.64	53	C	TRP	234	4.405	21.300	92.295	1.00
	ATOM 15.96	54	O	TRP	234	4.413	20.139	91.829	1.00

	ATOM 16.35	55	N	GLU	235	3.820	22.323	91.686	1.00
	ATOM 0.00	56	H	GLU	235	3.838	23.203	92.107	1.00
5	ATOM 18.95	57	CA	GLU	235	3.152	22.179	90.402	1.00
	ATOM 19.45	58	CB	GLU	235	1.672	22.623	90.489	1.00
10	ATOM 21.99	59	CG	GLU	235	0.789	21.713	91.394	1.00
	ATOM 24.05	60	CD	GLU	235	-0.684	21.852	91.119	1.00
	ATOM 26.95	61	OE1	GLU	235	-1.084	22.883	90.512	1.00
15	ATOM 24.79	62	OE2	GLU	235	-1.450	20.942	91.542	1.00
	ATOM 19.29	63	C	GLU	235	3.885	23.036	89.360	1.00
20	ATOM 20.91	64	O	GLU	235	3.701	22.834	88.169	1.00
	ATOM 19.88	65	N	ASP	236	4.691	23.997	89.811	1.00
	ATOM 0.00	66	H	ASP	236	4.823	24.117	90.773	1.00
25	ATOM 20.52	67	CA	ASP	236	5.384	24.897	88.880	1.00
	ATOM 21.88	68	CB	ASP	236	5.972	26.104	89.645	1.00
30	ATOM 24.16	69	CG	ASP	236	6.438	27.211	88.724	1.00
	ATOM 25.94	70	OD1	ASP	236	5.609	27.763	87.958	1.00
	ATOM 26.72	71	OD2	ASP	236	7.641	27.543	88.786	1.00
35	ATOM 19.94	72	C	ASP	236	6.465	24.212	88.035	1.00
	ATOM 20.22	73	O	ASP	236	7.405	23.589	88.560	1.00
40	ATOM 19.19	74	N	GLU	237	6.363	24.421	86.726	1.00
	ATOM 0.00	75	H	GLU	237	5.643	24.976	86.428	1.00
	ATOM 18.93	76	CA	GLU	237	7.291	23.876	85.759	1.00
45	ATOM 21.53	77	CB	GLU	237	6.767	24.171	84.336	1.00
	ATOM 25.16	78	CG	GLU	237	5.949	25.481	84.159	1.00
50	ATOM 26.69	79	CD	GLU	237	4.521	25.450	84.779	1.00
	ATOM 28.81	80	OE1	GLU	237	3.679	24.578	84.402	1.00
	ATOM 28.14	81	OE2	GLU	237	4.253	26.327	85.629	1.00
55	ATOM 18.12	82	C	GLU	237	8.740	24.369	85.919	1.00
	ATOM 18.57	83	O	GLU	237	9.684	23.709	85.466	1.00

	ATOM 16.91	84	N	TRP	238	8.924	25.472	86.635	1.00
	ATOM 0.00	85	H	TRP	238	8.164	25.919	87.048	1.00
5	ATOM 16.06	86	CA	TRP	238	10.266	26.021	86.808	1.00
	ATOM 16.99	87	CB	TRP	238	10.289	27.557	86.586	1.00
10	ATOM 18.25	88	CG	TRP	238	10.110	28.031	85.147	1.00
	ATOM 19.01	89	CD2	TRP	238	8.886	28.388	84.524	1.00
	ATOM 18.54	90	CE2	TRP	238	9.200	28.819	83.207	1.00
15	ATOM 18.64	91	CE3	TRP	238	7.547	28.380	84.949	1.00
	ATOM 17.51	92	CD1	TRP	238	11.090	28.244	84.221	1.00
20	ATOM 18.52	93	NE1	TRP	238	10.558	28.711	83.052	1.00
	ATOM 0.00	94	HE1	TRP	238	11.049	28.951	82.237	1.00
	ATOM 20.29	95	CZ2	TRP	238	8.216	29.244	82.317	1.00
25	ATOM 20.70	96	CZ3	TRP	238	6.582	28.790	84.075	1.00
	ATOM 20.69	97	CH2	TRP	238	6.908	29.220	82.767	1.00
30	ATOM 14.67	98	C	TRP	238	10.976	25.689	88.109	1.00
	ATOM 14.18	99	O	TRP	238	12.196	25.840	88.205	1.00
	ATOM 13.40	100	N	GLU	239	10.264	25.185	89.119	1.00
35	ATOM 0.00	101	H	GLU	239	9.309	25.008	89.012	1.00
	ATOM 12.41	102	CA	GLU	239	10.915	24.882	90.388	1.00
40	ATOM 13.82	103	CB	GLU	239	9.893	24.602	91.513	1.00
	ATOM 13.92	104	CG	GLU	239	10.526	24.406	92.876	1.00
	ATOM 15.04	105	CD	GLU	239	10.802	25.700	93.640	1.00
45	ATOM 15.02	106	OE1	GLU	239	10.143	26.716	93.321	1.00
	ATOM 14.50	107	OE2	GLU	239	11.666	25.716	94.544	1.00
50	ATOM 12.24	108	C	GLU	239	11.804	23.648	90.233	1.00
	ATOM 13.77	109	O	GLU	239	11.391	22.668	89.611	1.00
	ATOM 11.71	110	N	VAL	240	13.023	23.735	90.766	1.00
55	ATOM 0.00	111	H	VAL	240	13.299	24.560	91.203	1.00
	ATOM 12.51	112	CA	VAL	240	13.945	22.598	90.744	1.00

	ATOM 12.10	113	CB	VAL	240	15.105	22.733	89.670	1.00
	ATOM 13.18	114	CG1	VAL	240	14.585	22.850	88.277	1.00
5	ATOM 10.76	115	CG2	VAL	240	16.071	23.859	90.061	1.00
	ATOM 12.39	116	C	VAL	240	14.616	22.422	92.110	1.00
10	ATOM 12.42	117	O	VAL	240	14.841	23.375	92.870	1.00
	ATOM 11.86	118	N	PRO	241	14.908	21.154	92.491	1.00
	ATOM 12.24	119	CD	PRO	241	14.473	19.902	91.840	1.00
15	ATOM 12.65	120	CA	PRO	241	15.568	20.912	93.767	1.00
	ATOM 11.78	121	CB	PRO	241	15.730	19.372	93.775	1.00
20	ATOM 12.22	122	CG	PRO	241	14.565	18.895	92.974	1.00
	ATOM 11.85	123	C	PRO	241	16.962	21.570	93.740	1.00
	ATOM 12.46	124	O	PRO	241	17.620	21.555	92.693	1.00
25	ATOM 12.89	125	N	ARG	242	17.384	22.198	94.832	1.00
	ATOM 0.00	126	H	ARG	242	16.795	22.250	95.619	1.00
30	ATOM 12.40	127	CA	ARG	242	18.708	22.830	94.861	1.00
	ATOM 14.75	128	CB	ARG	242	18.950	23.533	96.193	1.00
	ATOM 15.25	129	CG	ARG	242	20.091	24.535	96.113	1.00
35	ATOM 17.56	130	CD	ARG	242	20.541	25.070	97.460	1.00
	ATOM 18.07	131	NE	ARG	242	19.422	25.556	98.268	1.00
40	ATOM 0.00	132	HE	ARG	242	19.107	24.977	98.985	1.00
	ATOM 19.12	133	CZ	ARG	242	18.799	26.724	98.110	1.00
	ATOM 19.73	134	NH1	ARG	242	19.166	27.577	97.161	1.00
45	ATOM 0.00	135	HH11	ARG	242	19.915	27.339	96.534	1.00
	ATOM 0.00	136	HH12	ARG	242	18.676	28.436	97.031	1.00
50	ATOM 18.83	137	NH2	ARG	242	17.780	27.032	98.902	1.00
	ATOM 0.00	138	HH21	ARG	242	17.506	26.405	99.623	1.00
	ATOM 0.00	139	HH22	ARG	242	17.312	27.908	98.781	1.00
55	ATOM 12.95	140	C	ARG	242	19.895	21.875	94.555	1.00
	ATOM 11.99	141	O	ARG	242	20.894	22.277	93.987	1.00

	ATOM 13.41	142	N	GLU	243	19.697	20.585	94.822	1.00
	ATOM 0.00	143	H	GLU	243	18.842	20.286	95.170	1.00
5	ATOM 14.21	144	CA	GLU	243	20.754	19.606	94.572	1.00
	ATOM 16.12	145	CB	GLU	243	20.342	18.237	95.178	1.00
10	ATOM 21.22	146	CG	GLU	243	20.061	18.260	96.691	1.00
	ATOM 22.86	147	CD	GLU	243	18.709	18.847	97.095	1.00
	ATOM 22.70	148	OE1	GLU	243	17.795	18.975	96.259	1.00
15	ATOM 25.06	149	OE2	GLU	243	18.539	19.103	98.316	1.00
	ATOM 12.77	150	C	GLU	243	21.102	19.446	93.076	1.00
20	ATOM 12.70	151	O	GLU	243	22.152	18.874	92.721	1.00
	ATOM 11.90	152	N	THR	244	20.240	19.959	92.200	1.00
	ATOM 0.00	153	H	THR	244	19.429	20.393	92.526	1.00
25	ATOM 11.33	154	CA	THR	244	20.480	19.869	90.761	1.00
	ATOM 11.58	155	CB	THR	244	19.178	20.061	89.922	1.00
30	ATOM 12.20	156	OG1	THR	244	18.722	21.409	90.111	1.00
	ATOM 0.00	157	HG1	THR	244	18.543	21.529	91.048	1.00
	ATOM 11.12	158	CG2	THR	244	18.068	19.018	90.329	1.00
35	ATOM 10.60	159	C	THR	244	21.513	20.905	90.309	1.00
	ATOM 9.84	160	O	THR	244	22.005	20.841	89.187	1.00
40	ATOM 10.02	161	N	LEU	245	21.893	21.813	91.196	1.00
	ATOM 0.00	162	H	LEU	245	21.570	21.783	92.115	1.00
	ATOM 10.44	163	CA	LEU	245	22.835	22.865	90.806	1.00
45	ATOM 9.40	164	CB	LEU	245	22.179	24.221	91.148	1.00
	ATOM 10.29	165	CG	LEU	245	20.838	24.462	90.428	1.00
50	ATOM 11.97	166	CD1	LEU	245	20.055	25.579	91.158	1.00
	ATOM 11.52	167	CD2	LEU	245	21.079	24.863	88.989	1.00
	ATOM 11.15	168	C	LEU	245	24.183	22.828	91.494	1.00
55	ATOM 13.40	169	O	LEU	245	24.257	22.514	92.699	1.00
	ATOM 10.77	170	N	LYS	246	25.230	23.052	90.715	1.00

	ATOM 0.00	171	H	LYS	246	25.086	23.177	89.756	1.00
	ATOM 12.14	172	CA	LYS	246	26.597	23.139	91.215	1.00
5	ATOM 13.85	173	CB	LYS	246	27.528	22.118	90.572	1.00
	ATOM 16.33	174	CG	LYS	246	28.935	22.225	91.133	1.00
10	ATOM 19.11	175	CD	LYS	246	29.970	21.564	90.205	1.00
	ATOM 20.77	176	CE	LYS	246	31.305	21.487	90.910	1.00
	ATOM 22.87	177	NZ	LYS	246	32.177	20.585	90.041	1.00
15	ATOM 0.00	178	HZ1	LYS	246	32.285	20.988	89.106	1.00
	ATOM 0.00	179	HZ2	LYS	246	31.712	19.652	89.977	1.00
20	ATOM 0.00	180	HZ3	LYS	246	33.102	20.464	90.502	1.00
	ATOM 10.91	181	C	LYS	246	27.051	24.538	90.814	1.00
	ATOM 10.91	182	O	LYS	246	27.037	24.876	89.642	1.00
25	ATOM 9.61	183	N	LEU	247	27.367	25.383	91.798	0.60
	ATOM 0.00	184	H	LEU	247	27.319	25.075	92.714	1.00
30	ATOM 9.63	185	CA	LEU	247	27.815	26.761	91.532	0.60
	ATOM 9.83	186	CB	LEU	247	27.348	27.712	92.652	0.60
	ATOM 10.31	187	CG	LEU	247	25.846	28.129	92.642	0.60
35	ATOM 13.23	188	CD1	LEU	247	24.882	26.939	92.630	0.60
	ATOM 11.95	189	CD2	LEU	247	25.564	29.031	93.833	0.60
40	ATOM 10.71	190	C	LEU	247	29.327	26.666	91.428	0.60
	ATOM 10.43	191	O	LEU	247	29.973	26.180	92.342	0.60
	ATOM 11.88	192	N	VAL	248	29.873	27.137	90.313	1.00
45	ATOM 0.00	193	H	VAL	248	29.310	27.614	89.675	1.00
	ATOM 13.11	194	CA	VAL	248	31.310	26.991	90.003	1.00
50	ATOM 13.53	195	CB	VAL	248	31.498	26.319	88.602	1.00
	ATOM 14.85	196	CG1	VAL	248	32.978	26.241	88.210	1.00
	ATOM 14.81	197	CG2	VAL	248	30.899	24.899	88.605	1.00
55	ATOM 14.16	198	C	VAL	248	32.186	28.216	90.080	1.00
	ATOM 14.80	199	O	VAL	248	33.270	28.175	90.679	1.00

	ATOM 13.26	200	N	GLU	249	31.725	29.312	89.495	1.00
	ATOM 0.00	201	H	GLU	249	30.834	29.309	89.093	1.00
5	ATOM 13.80	202	CA	GLU	249	32.508	30.530	89.468	1.00
	ATOM 15.55	203	CB	GLU	249	33.134	30.677	88.091	1.00
10	ATOM 18.90	204	CG	GLU	249	34.014	31.912	87.944	1.00
	ATOM 21.24	205	CD	GLU	249	34.405	32.210	86.510	1.00
	ATOM 24.08	206	OE1	GLU	249	34.135	31.393	85.593	1.00
15	ATOM 22.80	207	OE2	GLU	249	34.913	33.319	86.265	1.00
	ATOM 13.85	208	C	GLU	249	31.631	31.727	89.746	1.00
20	ATOM 13.22	209	O	GLU	249	30.599	31.893	89.107	1.00
	ATOM 13.43	210	N	ARG	250	32.032	32.565	90.691	1.00
	ATOM 0.00	211	H	ARG	250	32.845	32.390	91.203	1.00
25	ATOM 13.91	212	CA	ARG	250	31.238	33.756	90.975	1.00
	ATOM 15.62	213	CB	ARG	250	31.424	34.209	92.429	1.00
30	ATOM 18.83	214	CG	ARG	250	30.454	35.361	92.785	1.00
	ATOM 21.47	215	CD	ARG	250	30.548	35.864	94.224	1.00
	ATOM 24.18	216	NE	ARG	250	31.929	35.904	94.643	1.00
35	ATOM 0.00	217	HE	ARG	250	32.576	35.446	94.077	1.00
	ATOM 25.74	218	CZ	ARG	250	32.379	36.480	95.742	1.00
40	ATOM 27.48	219	NH1	ARG	250	31.558	37.136	96.561	1.00
	ATOM 0.00	220	HH11	ARG	250	30.581	37.188	96.376	1.00
	ATOM 0.00	221	HH12	ARG	250	31.927	37.552	97.403	1.00
45	ATOM 28.18	222	NH2	ARG	250	33.593	36.137	96.166	1.00
	ATOM 0.00	223	HH21	ARG	250	34.096	35.413	95.681	1.00
50	ATOM 0.00	224	HH22	ARG	250	33.955	36.514	97.011	1.00
	ATOM 13.66	225	C	ARG	250	31.596	34.847	89.970	1.00
	ATOM 15.10	226	O	ARG	250	32.789	35.114	89.719	1.00
55	ATOM 12.58	227	N	LEU	251	30.567	35.378	89.300	1.00
	ATOM 0.00	228	H	LEU	251	29.669	35.062	89.490	1.00



	ATOM	229	CA	LEU	251	30.723	36.409	88.295	1.00
	11.75								
	ATOM	230	CB	LEU	251	29.719	36.195	87.157	1.00
	12.32								
5	ATOM	231	CG	LEU	251	29.810	34.803	86.565	1.00
	11.37								
	ATOM	232	CD1	LEU	251	28.787	34.682	85.487	1.00
	11.33								
10	ATOM	233	CD2	LEU	251	31.198	34.554	86.008	1.00
	12.76								
	ATOM	234	C	LEU	251	30.524	37.797	88.874	1.00
	12.74								
	ATOM	235	O	LEU	251	31.043	38.767	88.320	1.00
	13.60								
15	ATOM	236	N	GLY	252	29.736	37.884	89.939	1.00
	12.51								
	ATOM	237	H	GLY	252	29.333	37.075	90.321	1.00
	0.00								
	ATOM	238	CA	GLY	252	29.458	39.185	90.521	1.00
20	13.79								
	ATOM	239	C	GLY	252	28.902	39.056	91.900	1.00
	13.34								
	ATOM	240	O	GLY	252	28.356	38.030	92.292	1.00
	13.87								
25	ATOM	241	N	ALA	253	29.086	40.120	92.672	1.00
	14.74								
	ATOM	242	H	ALA	253	29.577	40.898	92.327	1.00
	0.00								
	ATOM	243	CA	ALA	253	28.596	40.172	94.040	1.00
30	16.13								
	ATOM	244	CB	ALA	253	29.648	39.731	95.035	1.00
	15.97								
	ATOM	245	C	ALA	253	28.179	41.593	94.332	1.00
	17.39								
35	ATOM	246	O	ALA	253	28.882	42.558	94.005	1.00
	17.53								
	ATOM	247	N	GLY	254	27.033	41.707	94.977	1.00
	17.78								
	ATOM	248	H	GLY	254	26.551	40.907	95.239	1.00
40	0.00								
	ATOM	249	CA	GLY	254	26.517	43.011	95.317	1.00
	18.08								
	ATOM	250	C	GLY	254	25.728	42.948	96.598	1.00
	17.45								
45	ATOM	251	O	GLY	254	25.644	41.956	97.325	1.00
	17.19								
	ATOM	252	N	GLN	255	25.101	44.066	96.868	1.00
	18.33								
	ATOM	253	H	GLN	255	25.164	44.813	96.258	1.00
50	0.00								
	ATOM	254	CA	GLN	255	24.301	44.213	98.045	1.00
	19.13								
	ATOM	255	CB	GLN	255	23.771	45.594	97.946	1.00
	19.95								
55	ATOM	256	CG	GLN	255	23.078	46.146	99.052	1.00
	22.32								
	ATOM	257	CD	GLN	255	22.847	47.590	98.718	1.00
	24.50								

	ATOM	258	OE1	GLN	255	22.188	48.281	99.453	1.00
	26.43								
	ATOM	259	NE2	GLN	255	23.403	48.048	97.588	1.00
	26.54								
5	ATOM	260	HE21	GLN	255	23.980	47.407	97.016	1.00
	0.00								
	ATOM	261	HE22	GLN	255	23.348	48.942	97.308	1.00
	0.00								
10	ATOM	262	C	GLN	255	23.114	43.280	98.164	1.00
	18.89								
	ATOM	263	O	GLN	255	22.715	42.912	99.277	1.00
	18.97								
	ATOM	264	N	PHE	256	22.566	42.891	97.016	1.00
	18.57								
15	ATOM	265	H	PHE	256	22.967	43.162	96.160	1.00
	0.00								
	ATOM	266	CA	PHE	256	21.387	42.039	97.045	1.00
	18.53								
20	ATOM	267	CB	PHE	256	20.361	42.561	96.047	1.00
	18.42								
	ATOM	268	CG	PHE	256	20.043	44.006	96.223	1.00
	19.55								
	ATOM	269	CD1	PHE	256	19.660	44.487	97.462	1.00
	19.76								
25	ATOM	270	CD2	PHE	256	20.163	44.889	95.149	1.00
	19.70								
	ATOM	271	CE1	PHE	256	19.391	45.854	97.651	1.00
	20.60								
	ATOM	272	CE2	PHE	256	19.905	46.252	95.312	1.00
	20.72								
30	ATOM	273	CZ	PHE	256	19.517	46.734	96.572	1.00
	21.23								
	ATOM	274	C	PHE	256	21.689	40.589	96.752	1.00
	18.00								
35	ATOM	275	O	PHE	256	20.764	39.761	96.636	1.00
	16.87								
	ATOM	276	N	GLY	257	22.973	40.284	96.577	1.00
	17.57								
40	ATOM	277	H	GLY	257	23.667	40.987	96.619	1.00
	0.00								
	ATOM	278	CA	GLY	257	23.337	38.913	96.293	1.00
	17.34								
	ATOM	279	C	GLY	257	24.491	38.688	95.333	1.00
	17.02								
45	ATOM	280	O	GLY	257	25.258	39.602	95.011	1.00
	17.68								
	ATOM	281	N	GLU	258	24.501	37.481	94.753	1.00
	14.48								
50	ATOM	282	H	GLU	258	23.782	36.853	94.960	1.00
	0.00								
	ATOM	283	CA	GLU	258	25.569	37.077	93.856	1.00
	14.43								
	ATOM	284	CB	GLU	258	26.448	36.038	94.559	1.00
	15.81								
55	ATOM	285	CG	GLU	258	27.085	36.578	95.872	1.00
	19.83								
	ATOM	286	CD	GLU	258	28.011	35.584	96.576	1.00
	22.41								

	ATOM 24.84	287	OE1	GLU	258	27.731	34.360	96.582	1.00
	ATOM 26.85	288	OE2	GLU	258	29.021	36.035	97.165	1.00
5	ATOM 12.27	289	C	GLU	258	25.069	36.481	92.551	1.00
	ATOM 12.35	290	O	GLU	258	23.942	36.024	92.462	1.00
10	ATOM 9.83	291	N	VAL	259	25.939	36.480	91.562	0.77
	ATOM 0.00	292	H	VAL	259	26.806	36.897	91.710	1.00
	ATOM 8.93	293	CA	VAL	259	25.657	35.863	90.262	0.77
15	ATOM 9.26	294	CB	VAL	259	25.650	36.867	89.108	0.77
	ATOM 8.23	295	CG1	VAL	259	25.414	36.115	87.754	0.77
20	ATOM 10.50	296	CG2	VAL	259	24.500	37.872	89.347	0.77
	ATOM 8.47	297	C	VAL	259	26.795	34.888	90.038	0.77
	ATOM 7.91	298	O	VAL	259	27.958	35.272	90.143	0.77
25	ATOM 7.79	299	N	TRP	260	26.454	33.642	89.724	1.00
	ATOM 0.00	300	H	TRP	260	25.509	33.403	89.658	1.00
30	ATOM 8.79	301	CA	TRP	260	27.449	32.614	89.503	1.00
	ATOM 10.03	302	CB	TRP	260	27.298	31.522	90.561	1.00
	ATOM 12.72	303	CG	TRP	260	27.700	31.898	91.938	1.00
35	ATOM 13.43	304	CD2	TRP	260	28.837	31.392	92.653	1.00
	ATOM 15.26	305	CE2	TRP	260	28.838	32.008	93.918	1.00
40	ATOM 14.66	306	CE3	TRP	260	29.836	30.464	92.335	1.00
	ATOM 12.67	307	CD1	TRP	260	27.066	32.770	92.780	1.00
	ATOM 15.10	308	NE1	TRP	260	27.763	32.834	93.984	1.00
45	ATOM 0.00	309	HE1	TRP	260	27.518	33.395	94.742	1.00
	ATOM 16.09	310	CZ2	TRP	260	29.825	31.723	94.876	1.00
50	ATOM 16.92	311	CZ3	TRP	260	30.813	30.188	93.297	1.00
	ATOM 16.41	312	CH2	TRP	260	30.796	30.815	94.547	1.00
	ATOM 8.56	313	C	TRP	260	27.242	31.864	88.202	1.00
55	ATOM 9.60	314	O	TRP	260	26.132	31.790	87.674	1.00
	ATOM 8.43	315	N	MET	261	28.341	31.349	87.662	1.00

	ATOM 0.00	316	H	MET	261	29.227	31.596	87.991	1.00
	ATOM 7.71	317	CA	MET	261	28.222	30.439	86.541	1.00
5	ATOM 9.06	318	CB	MET	261	29.469	30.486	85.644	1.00
	ATOM 9.93	319	CG	MET	261	29.476	29.473	84.493	1.00
10	ATOM 12.84	320	SD	MET	261	30.097	27.818	85.014	1.00
	ATOM 15.22	321	CE	MET	261	31.911	28.132	85.302	1.00
	ATOM 8.44	322	C	MET	261	28.150	29.077	87.245	1.00
15	ATOM 8.95	323	O	MET	261	28.814	28.856	88.244	1.00
	ATOM 8.18	324	N	GLY	262	27.295	28.195	86.773	1.00
20	ATOM 0.00	325	H	GLY	262	26.731	28.417	86.018	1.00
	ATOM 8.32	326	CA	GLY	262	27.203	26.878	87.413	1.00
	ATOM 5.91	327	C	GLY	262	26.648	25.894	86.401	1.00
25	ATOM 5.98	328	O	GLY	262	26.517	26.175	85.206	1.00
	ATOM 6.89	329	N	TYR	263	26.415	24.666	86.875	1.00
30	ATOM 0.00	330	H	TYR	263	26.583	24.448	87.807	1.00
	ATOM 7.28	331	CA	TYR	263	25.861	23.637	85.987	1.00
	ATOM 8.06	332	CB	TYR	263	26.889	22.496	85.841	1.00
35	ATOM 10.09	333	CG	TYR	263	28.080	22.924	85.048	1.00
	ATOM 10.54	334	CD1	TYR	263	28.044	22.868	83.662	1.00
40	ATOM 14.47	335	CE1	TYR	263	29.066	23.364	82.901	1.00
	ATOM 12.72	336	CD2	TYR	263	29.184	23.476	85.673	1.00
	ATOM 14.68	337	CE2	TYR	263	30.221	23.978	84.935	1.00
45	ATOM 15.68	338	CZ	TYR	263	30.160	23.926	83.547	1.00
	ATOM 20.07	339	OH	TYR	263	31.170	24.487	82.778	1.00
50	ATOM 0.00	340	HH	TYR	263	30.989	24.389	81.857	1.00
	ATOM 6.81	341	C	TYR	263	24.615	23.016	86.596	1.00
	ATOM 8.23	342	O	TYR	263	24.563	22.811	87.826	1.00
55	ATOM 7.63	343	N	TYR	264	23.617	22.767	85.750	1.00
	ATOM 0.00	344	H	TYR	264	23.733	23.013	84.815	1.00

	ATOM 8.60	345	CA	TYR	264	22.369	22.110	86.128	1.00
	ATOM 9.34	346	CB	TYR	264	21.156	22.808	85.446	1.00
5	ATOM 9.75	347	CG	TYR	264	19.866	22.028	85.585	1.00
	ATOM 10.24	348	CD1	TYR	264	19.102	22.129	86.754	1.00
10	ATOM 10.67	349	CE1	TYR	264	17.959	21.354	86.929	1.00
	ATOM 11.81	350	CD2	TYR	264	19.453	21.136	84.586	1.00
	ATOM 11.92	351	CE2	TYR	264	18.282	20.337	84.756	1.00
15	ATOM 12.03	352	CZ	TYR	264	17.562	20.474	85.941	1.00
	ATOM 14.04	353	OH	TYR	264	16.420	19.720	86.154	1.00
20	ATOM 0.00	354	HH	TYR	264	16.040	19.932	86.999	1.00
	ATOM 8.08	355	C	TYR	264	22.492	20.651	85.665	1.00
	ATOM 7.72	356	O	TYR	264	22.826	20.368	84.513	1.00
25	ATOM 8.42	357	N	ASN	265	22.291	19.749	86.621	1.00
	ATOM 0.00	358	H	ASN	265	22.114	20.076	87.520	1.00
30	ATOM 8.83	359	CA	ASN	265	22.350	18.290	86.352	1.00
	ATOM 10.23	360	CB	ASN	265	21.111	17.794	85.571	1.00
	ATOM 12.04	361	CG	ASN	265	19.909	17.513	86.449	1.00
35	ATOM 16.27	362	OD1	ASN	265	18.922	16.924	85.971	1.00
	ATOM 10.60	363	ND2	ASN	265	19.987	17.846	87.700	1.00
40	ATOM 0.00	364	HD21	ASN	265	20.791	18.278	88.040	1.00
	ATOM 0.00	365	HD22	ASN	265	19.200	17.675	88.263	1.00
	ATOM 8.05	366	C	ASN	265	23.655	17.896	85.654	1.00
45	ATOM 9.88	367	O	ASN	265	23.664	17.133	84.672	1.00
	ATOM 7.83	368	N	GLY	266	24.734	18.494	86.141	1.00
50	ATOM 0.00	369	H	GLY	266	24.621	19.165	86.832	1.00
	ATOM 6.92	370	CA	GLY	266	26.076	18.161	85.677	1.00
	ATOM 6.25	371	C	GLY	266	26.558	18.718	84.367	1.00
55	ATOM 9.19	372	O	GLY	266	27.690	19.215	84.313	1.00
	ATOM 2.00	373	N	HIS	267	25.705	18.747	83.348	0.49

	ATOM 0.00	374	H	HIS	267	24.768	18.516	83.488	1.00
	ATOM 2.00	375	CA	HIS	267	26.132	19.118	82.007	0.49
5	ATOM 2.00	376	CB	HIS	267	25.644	18.007	81.071	0.49
	ATOM 2.00	377	CG	HIS	267	26.288	16.707	81.346	0.49
10	ATOM 2.00	378	CD2	HIS	267	27.610	16.377	81.362	0.49
	ATOM 2.60	379	ND1	HIS	267	25.611	15.575	81.738	0.49
	ATOM 0.00	380	HD1	HIS	267	24.637	15.483	81.811	1.00
15	ATOM 2.00	381	CE1	HIS	267	26.481	14.607	81.990	0.49
	ATOM 3.36	382	NE2	HIS	267	27.697	15.089	81.760	0.49
20	ATOM 0.00	383	HE2	HIS	267	28.533	14.590	81.874	1.00
	ATOM 2.00	384	C	HIS	267	25.678	20.418	81.398	0.49
	ATOM 2.30	385	O	HIS	267	26.213	20.808	80.365	0.49
25	ATOM 5.29	386	N	THR	268	24.710	21.092	82.013	1.00
	ATOM 0.00	387	H	THR	268	24.397	20.822	82.896	1.00
30	ATOM 6.10	388	CA	THR	268	24.145	22.270	81.320	1.00
	ATOM 7.20	389	CB	THR	268	22.609	22.169	81.303	1.00
	ATOM 7.82	390	OG1	THR	268	22.235	20.980	80.601	1.00
35	ATOM 0.00	391	HG1	THR	268	22.598	20.214	81.047	1.00
	ATOM 7.70	392	CG2	THR	268	22.010	23.369	80.495	1.00
40	ATOM 5.45	393	C	THR	268	24.549	23.551	82.050	1.00
	ATOM 6.14	394	O	THR	268	24.164	23.747	83.189	1.00
	ATOM 6.47	395	N	LYS	269	25.347	24.370	81.356	1.00
45	ATOM 0.00	396	H	LYS	269	25.557	24.141	80.425	1.00
	ATOM 6.35	397	CA	LYS	269	25.901	25.592	81.925	1.00
50	ATOM 7.90	398	CB	LYS	269	26.940	26.166	80.973	1.00
	ATOM 10.78	399	CG	LYS	269	27.866	27.140	81.613	1.00
	ATOM 13.81	400	CD	LYS	269	29.023	27.358	80.618	1.00
55	ATOM 17.11	401	CE	LYS	269	30.233	27.795	81.340	1.00
	ATOM 19.10	402	NZ	LYS	269	31.390	27.884	80.376	1.00

	ATOM 0.00	403	HZ1	LYS	269	31.172	28.567	79.641	1.00
	ATOM 0.00	404	HZ2	LYS	269	31.566	26.944	79.962	1.00
5	ATOM 0.00	405	HZ3	LYS	269	32.243	28.180	80.907	1.00
	ATOM 7.04	406	C	LYS	269	24.753	26.567	82.074	1.00
10	ATOM 7.34	407	O	LYS	269	23.952	26.722	81.169	1.00
	ATOM 5.91	408	N	VAL	270	24.690	27.205	83.238	1.00
	ATOM 0.00	409	H	VAL	270	25.398	27.048	83.893	1.00
15	ATOM 6.63	410	CA	VAL	270	23.629	28.177	83.546	1.00
	ATOM 6.46	411	CB	VAL	270	22.509	27.481	84.400	1.00
20	ATOM 7.32	412	CG1	VAL	270	21.803	26.405	83.568	1.00
	ATOM 7.53	413	CG2	VAL	270	23.083	26.839	85.698	1.00
	ATOM 6.17	414	C	VAL	270	24.182	29.316	84.395	1.00
25	ATOM 6.51	415	O	VAL	270	25.268	29.240	84.916	1.00
	ATOM 6.02	416	N	ALA	271	23.443	30.426	84.450	1.00
30	ATOM 0.00	417	H	ALA	271	22.644	30.496	83.891	1.00
	ATOM 5.74	418	CA	ALA	271	23.788	31.527	85.338	1.00
	ATOM 5.67	419	CB	ALA	271	23.574	32.853	84.648	1.00
35	ATOM 5.85	420	C	ALA	271	22.814	31.423	86.540	1.00
	ATOM 7.29	421	O	ALA	271	21.608	31.142	86.381	1.00
40	ATOM 7.39	422	N	VAL	272	23.318	31.635	87.747	1.00
	ATOM 0.00	423	H	VAL	272	24.267	31.833	87.843	1.00
	ATOM 8.08	424	CA	VAL	272	22.475	31.543	88.936	1.00
45	ATOM 8.79	425	CB	VAL	272	22.969	30.428	89.899	1.00
	ATOM 9.68	426	CG1	VAL	272	22.070	30.343	91.136	1.00
50	ATOM 9.63	427	CG2	VAL	272	23.015	29.076	89.131	1.00
	ATOM 9.60	428	C	VAL	272	22.581	32.834	89.722	1.00
	ATOM 11.01	429	O	VAL	272	23.684	33.284	89.989	1.00
55	ATOM 9.34	430	N	LYS	273	21.451	33.495	89.956	1.00
	ATOM 0.00	431	H	LYS	273	20.623	33.163	89.587	1.00

	ATOM 9.94	432	CA	LYS	273	21.441	34.713	90.766	1.00
	ATOM 13.05	433	CB	LYS	273	20.613	35.821	90.094	1.00
5	ATOM 16.55	434	CG	LYS	273	20.444	36.981	91.030	1.00
	ATOM 18.34	435	CD	LYS	273	20.241	38.260	90.283	1.00
10	ATOM 18.99	436	CE	LYS	273	18.990	38.229	89.471	1.00
	ATOM 21.97	437	NZ	LYS	273	18.646	39.634	89.043	1.00
	ATOM 0.00	438	HZ1	LYS	273	19.448	40.027	88.524	1.00
15	ATOM 0.00	439	HZ2	LYS	273	18.496	40.175	89.925	1.00
	ATOM 0.00	440	HZ3	LYS	273	17.792	39.616	88.478	1.00
20	ATOM 10.21	441	C	LYS	273	20.871	34.330	92.124	1.00
	ATOM 10.49	442	O	LYS	273	19.781	33.769	92.200	1.00
	ATOM 8.89	443	N	SER	274	21.606	34.614	93.188	0.65
25	ATOM 0.00	444	H	SER	274	22.451	35.070	93.082	1.00
	ATOM 10.39	445	CA	SER	274	21.170	34.262	94.530	0.65
30	ATOM 10.95	446	CB	SER	274	22.290	33.526	95.266	0.65
	ATOM 12.46	447	OG	SER	274	23.412	34.386	95.458	0.65
	ATOM 0.00	448	HG	SER	274	23.734	34.694	94.615	1.00
35	ATOM 10.72	449	C	SER	274	20.827	35.531	95.287	0.65
	ATOM 11.54	450	O	SER	274	21.436	36.556	95.060	0.65
40	ATOM 12.75	451	N	LEU	275	19.802	35.439	96.128	1.00
	ATOM 0.00	452	H	LEU	275	19.341	34.581	96.220	1.00
	ATOM 14.16	453	CA	LEU	275	19.322	36.539	96.946	1.00
45	ATOM 14.72	454	CB	LEU	275	17.799	36.441	97.131	1.00
	ATOM 15.26	455	CG	LEU	275	17.126	37.358	98.176	1.00
50	ATOM 14.76	456	CD1	LEU	275	17.373	38.810	97.880	1.00
	ATOM 15.40	457	CD2	LEU	275	15.642	37.071	98.223	1.00
	ATOM 14.90	458	C	LEU	275	19.957	36.461	98.300	1.00
55	ATOM 15.55	459	O	LEU	275	19.884	35.439	98.984	1.00
	ATOM 16.04	460	N	LYS	276	20.560	37.570	98.687	1.00



	ATOM 0.00	461	H	LYS	276	20.585	38.337	98.075	1.00
	ATOM 18.12	462	CA	LYS	276	21.161	37.698	100.008	1.00
5	ATOM 17.89	463	CB	LYS	276	22.041	38.935	100.022	1.00
	ATOM 20.43	464	CG	LYS	276	22.544	39.200	101.420	1.00
10	ATOM 21.32	465	CD	LYS	276	23.537	40.284	101.422	1.00
	ATOM 23.30	466	CE	LYS	276	24.127	40.343	102.800	1.00
	ATOM 23.81	467	NZ	LYS	276	25.301	41.227	102.750	1.00
15	ATOM 0.00	468	HZ1	LYS	276	25.023	42.181	102.440	1.00
	ATOM 0.00	469	HZ2	LYS	276	25.992	40.837	102.068	1.00
20	ATOM 0.00	470	HZ3	LYS	276	25.742	41.282	103.688	1.00
	ATOM 18.63	471	C	LYS	276	20.010	37.870	100.986	1.00
	ATOM 18.34	472	O	LYS	276	19.317	38.883	100.927	1.00
25	ATOM 20.10	473	N	ALA	277	19.804	36.878	101.854	1.00
	ATOM 0.00	474	H	ALA	277	20.411	36.106	101.843	1.00
30	ATOM 21.51	475	CA	ALA	277	18.696	36.896	102.809	1.00
	ATOM 21.27	476	CB	ALA	277	18.744	35.672	103.740	1.00
	ATOM 21.38	477	C	ALA	277	18.662	38.192	103.608	1.00
35	ATOM 23.46	478	O	ALA	277	19.689	38.632	104.114	1.00
	ATOM 21.75	479	N	GLY	278	17.498	38.841	103.623	1.00
40	ATOM 0.00	480	H	GLY	278	16.742	38.457	103.137	1.00
	ATOM 21.96	481	CA	GLY	278	17.335	40.098	104.345	1.00
	ATOM 21.14	482	C	GLY	278	17.703	41.377	103.617	1.00
45	ATOM 22.05	483	O	GLY	278	17.305	42.473	104.045	1.00
	ATOM 20.64	484	N	SER	279	18.394	41.263	102.487	1.00
50	ATOM 0.00	485	H	SER	279	18.644	40.372	102.161	1.00
	ATOM 19.52	486	CA	SER	279	18.819	42.442	101.738	1.00
	ATOM 19.84	487	CB	SER	279	19.972	42.078	100.785	1.00
55	ATOM 18.98	488	OG	SER	279	19.440	41.327	99.694	1.00
	ATOM 0.00	489	HG	SER	279	20.154	41.097	99.086	1.00

	ATOM 19.74	490	C	SER	279	17.712	43.126	100.952	1.00
	ATOM 20.02	491	O	SER	279	17.835	44.293	100.568	1.00
5	ATOM 17.85	492	N	MET	280	16.637	42.390	100.700	1.00
	ATOM 0.00	493	H	MET	280	16.594	41.465	101.047	1.00
10	ATOM 16.89	494	CA	MET	280	15.489	42.901	99.956	1.00
	ATOM 17.51	495	CB	MET	280	15.839	43.178	98.496	1.00
	ATOM 17.40	496	CG	MET	280	16.225	41.950	97.688	1.00
15	ATOM 18.85	497	SD	MET	280	16.460	42.297	95.951	1.00
	ATOM 16.54	498	CE	MET	280	14.770	42.465	95.400	1.00
	ATOM 15.88	499	C	MET	280	14.422	41.828	100.044	1.00
20	ATOM 16.00	500	O	MET	280	14.692	40.713	100.422	1.00
	ATOM 14.52	501	N	SER	281	13.194	42.197	99.739	1.00
25	ATOM 0.00	502	H	SER	281	13.024	43.121	99.473	1.00
	ATOM 14.28	503	CA	SER	281	12.100	41.271	99.799	1.00
30	ATOM 15.24	504	CB	SER	281	10.811	42.032	99.436	1.00
	ATOM 16.19	505	OG	SER	281	9.768	41.133	99.163	1.00
	ATOM 0.00	506	HG	SER	281	10.032	40.550	98.442	1.00
35	ATOM 12.89	507	C	SER	281	12.231	40.062	98.869	1.00
	ATOM 12.83	508	O	SER	281	12.536	40.225	97.691	1.00
40	ATOM 11.26	509	N	PRO	282	11.948	38.860	99.374	0.51
	ATOM 10.63	510	CD	PRO	282	11.412	38.488	100.692	0.51
	ATOM 9.61	511	CA	PRO	282	12.044	37.698	98.489	0.51
45	ATOM 9.95	512	CB	PRO	282	11.828	36.511	99.427	0.51
	ATOM 10.91	513	CG	PRO	282	11.890	37.067	100.820	0.51
	ATOM 8.61	514	C	PRO	282	10.938	37.789	97.410	0.51
50	ATOM 5.03	515	O	PRO	282	11.081	37.265	96.317	0.51
	ATOM 10.53	516	N	ASP	283	9.820	38.444	97.734	1.00
55	ATOM 0.00	517	H	ASP	283	9.710	38.821	98.636	1.00
	ATOM 11.00	518	CA	ASP	283	8.752	38.607	96.773	1.00

	ATOM 13.39	519	CB	ASP	283	7.477	39.171	97.472	1.00
	ATOM 16.20	520	CG	ASP	283	6.286	39.334	96.495	1.00
5	ATOM 18.15	521	OD1	ASP	283	5.792	38.307	95.941	1.00
	ATOM 16.68	522	OD2	ASP	283	5.810	40.470	96.263	1.00
10	ATOM 10.60	523	C	ASP	283	9.237	39.535	95.651	1.00
	ATOM 11.89	524	O	ASP	283	9.008	39.267	94.491	1.00
	ATOM 12.01	525	N	ALA	284	9.901	40.638	96.000	1.00
15	ATOM 0.00	526	H	ALA	284	10.073	40.837	96.948	1.00
	ATOM 11.82	527	CA	ALA	284	10.402	41.553	94.983	1.00
20	ATOM 12.76	528	CB	ALA	284	11.085	42.782	95.643	1.00
	ATOM 11.34	529	C	ALA	284	11.421	40.824	94.112	1.00
	ATOM 12.67	530	O	ALA	284	11.451	40.994	92.910	1.00
25	ATOM 11.20	531	N	PHE	285	12.292	40.068	94.752	1.00
	ATOM 0.00	532	H	PHE	285	12.230	40.005	95.726	1.00
30	ATOM 10.80	533	CA	PHE	285	13.324	39.315	94.027	1.00
	ATOM 10.15	534	CB	PHE	285	14.185	38.521	95.038	1.00
	ATOM 10.28	535	CG	PHE	285	15.303	37.735	94.414	1.00
35	ATOM 10.36	536	CD1	PHE	285	16.477	38.381	94.036	1.00
	ATOM 10.04	537	CD2	PHE	285	15.182	36.358	94.211	1.00
40	ATOM 11.72	538	CE1	PHE	285	17.557	37.626	93.439	1.00
	ATOM 9.70	539	CE2	PHE	285	16.240	35.612	93.622	1.00
	ATOM 9.67	540	CZ	PHE	285	17.408	36.252	93.244	1.00
45	ATOM 10.63	541	C	PHE	285	12.667	38.349	93.011	1.00
	ATOM 11.66	542	O	PHE	285	13.036	38.328	91.833	1.00
50	ATOM 9.81	543	N	LEU	286	11.680	37.574	93.453	1.00
	ATOM 0.00	544	H	LEU	286	11.360	37.667	94.365	1.00
	ATOM 11.19	545	CA	LEU	286	11.055	36.582	92.565	1.00
55	ATOM 11.45	546	CB	LEU	286	10.354	35.491	93.373	1.00
	ATOM 11.02	547	CG	LEU	286	11.324	34.522	94.080	1.00

	ATOM 12.70	548	CD1	LEU	286	10.594	33.757	95.126	1.00
	ATOM 10.79	549	CD2	LEU	286	12.004	33.545	93.081	1.00
5	ATOM 11.27	550	C	LEU	286	10.129	37.149	91.534	1.00
	ATOM 11.78	551	O	LEU	286	9.775	36.501	90.559	1.00
10	ATOM 11.65	552	N	ALA	287	9.690	38.381	91.767	1.00
	ATOM 0.00	553	H	ALA	287	9.917	38.858	92.592	1.00
	ATOM 11.64	554	CA	ALA	287	8.820	39.011	90.792	1.00
15	ATOM 12.67	555	CB	ALA	287	8.409	40.422	91.276	1.00
	ATOM 10.99	556	C	ALA	287	9.434	39.050	89.383	1.00
20	ATOM 10.96	557	O	ALA	287	8.716	38.900	88.365	1.00
	ATOM 10.68	558	N	GLU	288	10.765	39.146	89.327	1.00
	ATOM 0.00	559	H	GLU	288	11.299	39.193	90.148	1.00
25	ATOM 10.51	560	CA	GLU	288	11.453	39.191	88.051	1.00
	ATOM 11.55	561	CB	GLU	288	12.935	39.481	88.257	1.00
30	ATOM 13.55	562	CG	GLU	288	13.663	39.445	86.924	1.00
	ATOM 15.93	563	CD	GLU	288	15.124	39.777	87.027	1.00
	ATOM 17.97	564	OE1	GLU	288	15.689	39.843	88.151	1.00
35	ATOM 16.29	565	OE2	GLU	288	15.723	39.984	85.959	1.00
	ATOM 9.59	566	C	GLU	288	11.309	37.847	87.345	1.00
40	ATOM 9.75	567	O	GLU	288	11.052	37.767	86.153	1.00
	ATOM 9.45	568	N	ALA	289	11.496	36.774	88.104	1.00
	ATOM 0.00	569	H	ALA	289	11.702	36.863	89.059	1.00
45	ATOM 9.52	570	CA	ALA	289	11.352	35.449	87.502	1.00
	ATOM 9.44	571	CB	ALA	289	11.724	34.414	88.530	1.00
50	ATOM 9.32	572	C	ALA	289	9.905	35.216	86.997	1.00
	ATOM 9.28	573	O	ALA	289	9.695	34.740	85.884	1.00
	ATOM 11.14	574	N	ASN	290	8.912	35.647	87.780	1.00
55	ATOM 0.00	575	H	ASN	290	9.101	36.050	88.649	1.00
	ATOM 11.56	576	CA	ASN	290	7.516	35.468	87.357	1.00

	ATOM 14.37	577	CB	ASN	290	6.569	35.952	88.466	1.00
	ATOM 17.32	578	CG	ASN	290	6.655	35.081	89.739	1.00
5	ATOM 19.80	579	OD1	ASN	290	7.075	33.943	89.680	1.00
	ATOM 17.51	580	ND2	ASN	290	6.187	35.593	90.851	1.00
10	ATOM 0.00	581	HD21	ASN	290	5.786	36.481	90.850	1.00
	ATOM 0.00	582	HD22	ASN	290	6.275	35.050	91.644	1.00
	ATOM 11.86	583	C	ASN	290	7.251	36.199	86.033	1.00
15	ATOM 11.62	584	O	ASN	290	6.587	35.677	85.153	1.00
	ATOM 11.22	585	N	LEU	291	7.836	37.387	85.868	1.00
20	ATOM 0.00	586	H	LEU	291	8.374	37.768	86.595	1.00
	ATOM 11.75	587	CA	LEU	291	7.656	38.133	84.625	1.00
	ATOM 12.23	588	CB	LEU	291	8.282	39.535	84.751	1.00
25	ATOM 13.03	589	CG	LEU	291	8.185	40.373	83.467	1.00
	ATOM 15.64	590	CD1	LEU	291	7.868	41.815	83.829	1.00
30	ATOM 14.61	591	CD2	LEU	291	9.504	40.288	82.637	1.00
	ATOM 11.60	592	C	LEU	291	8.309	37.393	83.472	1.00
	ATOM 11.66	593	O	LEU	291	7.775	37.337	82.375	1.00
35	ATOM 10.84	594	N	MET	292	9.492	36.843	83.729	1.00
	ATOM 0.00	595	H	MET	292	9.873	36.893	84.632	1.00
40	ATOM 11.69	596	CA	MET	292	10.214	36.128	82.669	1.00
	ATOM 10.20	597	CB	MET	292	11.631	35.762	83.112	1.00
	ATOM 10.33	598	CG	MET	292	12.483	37.020	83.427	1.00
45	ATOM 10.40	599	SD	MET	292	14.091	36.510	84.073	1.00
	ATOM 9.86	600	CE	MET	292	14.866	35.881	82.607	1.00
50	ATOM 12.23	601	C	MET	292	9.475	34.907	82.156	1.00
	ATOM 13.03	602	O	MET	292	9.647	34.562	80.981	1.00
	ATOM 13.02	603	N	LYS	293	8.584	34.350	82.985	1.00
55	ATOM 0.00	604	H	LYS	293	8.486	34.720	83.884	1.00
	ATOM 15.14	605	CA	LYS	293	7.762	33.188	82.564	1.00

	ATOM 14.94	606	CB	LYS	293	6.948	32.663	83.747	1.00
	ATOM 15.08	607	CG	LYS	293	7.766	32.128	84.906	1.00
5	ATOM 17.22	608	CD	LYS	293	6.890	31.761	86.085	1.00
	ATOM 18.51	609	CE	LYS	293	7.726	31.376	87.286	1.00
10	ATOM 19.83	610	NZ	LYS	293	6.887	30.902	88.479	1.00
	ATOM 0.00	611	HZ1	LYS	293	6.333	30.066	88.185	1.00
	ATOM 0.00	612	HZ2	LYS	293	6.239	31.661	88.760	1.00
15	ATOM 0.00	613	HZ3	LYS	293	7.507	30.647	89.260	1.00
	ATOM 16.53	614	C	LYS	293	6.829	33.606	81.421	1.00
20	ATOM 17.55	615	O	LYS	293	6.545	32.823	80.534	1.00
	ATOM 18.04	616	N	GLN	294	6.420	34.875	81.424	1.00
	ATOM 0.00	617	H	GLN	294	6.719	35.469	82.143	1.00
25	ATOM 19.92	618	CA	GLN	294	5.544	35.451	80.385	1.00
	ATOM 21.19	619	CB	GLN	294	4.688	36.565	80.996	1.00
30	ATOM 23.42	620	CG	GLN	294	3.862	36.130	82.160	1.00
	ATOM 24.85	621	CD	GLN	294	3.053	34.911	81.850	1.00
	ATOM 27.15	622	OE1	GLN	294	2.605	34.705	80.711	1.00
35	ATOM 27.14	623	NE2	GLN	294	2.836	34.090	82.865	1.00
	ATOM 0.00	624	HE21	GLN	294	3.177	34.317	83.740	1.00
40	ATOM 0.00	625	HE22	GLN	294	2.292	33.291	82.678	1.00
	ATOM 19.86	626	C	GLN	294	6.235	36.049	79.174	1.00
	ATOM 21.52	627	O	GLN	294	5.586	36.469	78.184	1.00
45	ATOM 17.72	628	N	LEU	295	7.538	36.240	79.273	1.00
	ATOM 0.00	629	H	LEU	295	8.005	35.994	80.100	1.00
50	ATOM 17.44	630	CA	LEU	295	8.259	36.856	78.183	1.00
	ATOM 18.33	631	CB	LEU	295	8.899	38.174	78.633	1.00
	ATOM 19.10	632	CG	LEU	295	8.089	39.439	78.537	1.00
55	ATOM 17.86	633	CD1	LEU	295	8.952	40.578	79.056	1.00
	ATOM 18.70	634	CD2	LEU	295	7.638	39.671	77.075	1.00

	ATOM 16.74	635	C	LEU	295	9.343	35.957	77.700	1.00
	ATOM 18.51	636	O	LEU	295	10.523	36.204	77.934	1.00
5	ATOM 14.87	637	N	GLN	296	8.954	35.007	76.874	1.00
	ATOM 0.00	638	H	GLN	296	8.013	34.951	76.608	1.00
10	ATOM 13.05	639	CA	GLN	296	9.889	34.056	76.344	1.00
	ATOM 14.33	640	CB	GLN	296	9.391	32.620	76.593	1.00
	ATOM 15.73	641	CG	GLN	296	9.240	32.242	78.076	1.00
15	ATOM 16.79	642	CD	GLN	296	8.768	30.784	78.185	1.00
	ATOM 18.93	643	OE1	GLN	296	9.296	29.906	77.494	1.00
20	ATOM 16.78	644	NE2	GLN	296	7.762	30.529	79.014	1.00
	ATOM 0.00	645	HE21	GLN	296	7.353	31.246	79.528	1.00
	ATOM 0.00	646	HE22	GLN	296	7.461	29.594	79.074	1.00
25	ATOM 11.48	647	C	GLN	296	10.094	34.290	74.857	1.00
	ATOM 12.22	648	O	GLN	296	9.158	34.239	74.065	1.00
30	ATOM 9.21	649	N	HIS	297	11.349	34.490	74.452	1.00
	ATOM 0.00	650	H	HIS	297	12.070	34.506	75.110	1.00
	ATOM 7.88	651	CA	HIS	297	11.667	34.709	73.042	1.00
35	ATOM 7.64	652	CB	HIS	297	11.381	36.185	72.696	1.00
	ATOM 7.02	653	CG	HIS	297	11.478	36.523	71.250	1.00
40	ATOM 6.74	654	CD2	HIS	297	10.499	36.614	70.288	1.00
	ATOM 8.34	655	ND1	HIS	297	12.645	36.853	70.603	1.00
	ATOM 0.00	656	HD1	HIS	297	13.521	36.897	71.018	1.00
45	ATOM 8.54	657	CE1	HIS	297	12.413	37.105	69.324	1.00
	ATOM 9.52	658	NE2	HIS	297	11.101	36.960	69.130	1.00
50	ATOM 0.00	659	HE2	HIS	297	10.657	37.102	68.264	1.00
	ATOM 7.79	660	C	HIS	297	13.175	34.449	72.851	1.00
	ATOM 7.26	661	O	HIS	297	13.956	34.573	73.811	1.00
55	ATOM 7.65	662	N	GLN	298	13.573	34.036	71.657	1.00
	ATOM 0.00	663	H	GLN	298	12.903	33.866	70.970	1.00

	ATOM 7.64	664	CA	GLN	298	15.013	33.818	71.377	1.00
	ATOM 10.16	665	CB	GLN	298	15.300	33.484	69.903	1.00
5	ATOM 11.96	666	CG	GLN	298	14.997	32.104	69.355	1.00
	ATOM 8.58	667	CD	GLN	298	15.649	30.957	70.130	1.00
10	ATOM 8.87	668	OE1	GLN	298	14.935	30.145	70.613	1.00
	ATOM 8.67	669	NE2	GLN	298	17.002	30.904	70.237	1.00
	ATOM 0.00	670	HE21	GLN	298	17.535	31.617	69.798	1.00
15	ATOM 0.00	671	HE22	GLN	298	17.380	30.158	70.698	1.00
	ATOM 7.38	672	C	GLN	298	15.925	34.990	71.685	1.00
20	ATOM 7.02	673	O	GLN	298	17.099	34.823	72.012	1.00
	ATOM 5.08	674	N	ARG	299	15.389	36.199	71.564	1.00
	ATOM 0.00	675	H	ARG	299	14.460	36.275	71.341	1.00
25	ATOM 4.55	676	CA	ARG	299	16.191	37.381	71.783	1.00
	ATOM 4.18	677	CB	ARG	299	15.713	38.518	70.842	1.00
30	ATOM 5.31	678	CG	ARG	299	15.844	38.163	69.343	1.00
	ATOM 5.70	679	CD	ARG	299	17.190	38.627	68.732	1.00
	ATOM 4.85	680	NE	ARG	299	18.367	38.057	69.401	1.00
35	ATOM 0.00	681	HE	ARG	299	18.907	38.669	69.940	1.00
	ATOM 5.72	682	CZ	ARG	299	18.762	36.772	69.325	1.00
40	ATOM 5.30	683	NH1	ARG	299	18.072	35.895	68.613	1.00
	ATOM 0.00	684	HH11	ARG	299	17.246	36.191	68.136	1.00
	ATOM 0.00	685	HH12	ARG	299	18.357	34.942	68.573	1.00
45	ATOM 5.26	686	NH2	ARG	299	19.887	36.428	69.941	1.00
	ATOM 0.00	687	HH21	ARG	299	20.424	37.131	70.406	1.00
50	ATOM 0.00	688	HH22	ARG	299	20.218	35.491	69.900	1.00
	ATOM 3.99	689	C	ARG	299	16.170	37.909	73.213	1.00
	ATOM 4.46	690	O	ARG	299	16.721	38.978	73.459	1.00
55	ATOM 3.70	691	N	LEU	300	15.570	37.189	74.152	1.00
	ATOM 0.00	692	H	LEU	300	15.123	36.350	73.885	1.00



	ATOM 2.76	693	CA	LEU	300	15.532	37.609	75.547	1.00
	ATOM 4.76	694	CB	LEU	300	14.065	37.745	75.990	1.00
5	ATOM 4.91	695	CG	LEU	300	13.374	39.107	75.659	1.00
	ATOM 5.95	696	CD1	LEU	300	13.310	39.464	74.206	1.00
10	ATOM 6.21	697	CD2	LEU	300	11.966	39.016	76.303	1.00
	ATOM 4.75	698	C	LEU	300	16.165	36.473	76.369	1.00
	ATOM 4.95	699	O	LEU	300	15.872	35.298	76.102	1.00
15	ATOM 4.59	700	N	VAL	301	16.977	36.818	77.352	1.00
	ATOM 0.00	701	H	VAL	301	17.165	37.766	77.515	1.00
20	ATOM 5.27	702	CA	VAL	301	17.610	35.808	78.204	1.00
	ATOM 6.48	703	CB	VAL	301	18.486	36.503	79.257	1.00
	ATOM 9.38	704	CG1	VAL	301	18.941	35.466	80.295	1.00
25	ATOM 7.92	705	CG2	VAL	301	19.709	37.060	78.572	1.00
	ATOM 5.74	706	C	VAL	301	16.469	34.980	78.818	1.00
30	ATOM 6.67	707	O	VAL	301	15.562	35.524	79.433	1.00
	ATOM 4.72	708	N	ARG	302	16.551	33.666	78.661	1.00
	ATOM 0.00	709	H	ARG	302	17.335	33.285	78.214	1.00
35	ATOM 5.24	710	CA	ARG	302	15.474	32.770	79.103	1.00
	ATOM 6.58	711	CB	ARG	302	15.495	31.536	78.171	1.00
40	ATOM 8.38	712	CG	ARG	302	14.401	30.467	78.475	1.00
	ATOM 13.26	713	CD	ARG	302	14.573	29.236	77.581	1.00
	ATOM 17.18	714	NE	ARG	302	13.573	28.193	77.840	1.00
45	ATOM 0.00	715	HE	ARG	302	12.760	28.179	77.302	1.00
	ATOM 18.72	716	CZ	ARG	302	13.720	27.260	78.785	1.00
50	ATOM 18.61	717	NH1	ARG	302	14.804	27.265	79.575	1.00
	ATOM 0.00	718	HH11	ARG	302	15.491	27.975	79.465	1.00
	ATOM 0.00	719	HH12	ARG	302	14.899	26.571	80.282	1.00
55	ATOM 20.90	720	NH2	ARG	302	12.828	26.268	78.880	1.00
	ATOM 0.00	721	HH21	ARG	302	12.071	26.223	78.242	1.00

	ATOM	722	HH22	ARG	302	12.944	25.566	79.586	1.00
	0.00								
	ATOM	723	C	ARG	302	15.565	32.306	80.554	1.00
	4.86								
5	ATOM	724	O	ARG	302	16.632	31.867	81.009	1.00
	5.51								
	ATOM	725	N	LEU	303	14.441	32.352	81.265	1.00
	4.43								
10	ATOM	726	H	LEU	303	13.645	32.794	80.920	1.00
	0.00								
	ATOM	727	CA	LEU	303	14.409	31.771	82.615	1.00
	5.26								
	ATOM	728	CB	LEU	303	13.068	32.048	83.282	1.00
	5.82								
15	ATOM	729	CG	LEU	303	12.908	31.501	84.712	1.00
	6.58								
	ATOM	730	CD1	LEU	303	13.851	32.214	85.738	1.00
	6.78								
20	ATOM	731	CD2	LEU	303	11.436	31.724	85.122	1.00
	7.19								
	ATOM	732	C	LEU	303	14.513	30.233	82.472	1.00
	7.27								
	ATOM	733	O	LEU	303	13.777	29.602	81.666	1.00
	8.97								
25	ATOM	734	N	TYR	304	15.381	29.645	83.287	1.00
	7.38								
	ATOM	735	H	TYR	304	15.846	30.185	83.941	1.00
	0.00								
30	ATOM	736	CA	TYR	304	15.628	28.207	83.279	1.00
	9.20								
	ATOM	737	CB	TYR	304	17.137	28.013	83.439	1.00
	12.10								
	ATOM	738	CG	TYR	304	17.668	26.670	83.106	1.00
	16.90								
35	ATOM	739	CD1	TYR	304	17.486	25.595	83.981	1.00
	18.59								
	ATOM	740	CE1	TYR	304	17.901	24.310	83.645	1.00
	19.46								
40	ATOM	741	CD2	TYR	304	18.291	26.442	81.891	1.00
	17.15								
	ATOM	742	CE2	TYR	304	18.692	25.155	81.538	1.00
	18.38								
	ATOM	743	CZ	TYR	304	18.485	24.105	82.417	1.00
	19.88								
45	ATOM	744	OH	TYR	304	18.825	22.837	82.035	1.00
	20.68								
	ATOM	745	HH	TYR	304	19.174	22.852	81.144	1.00
	0.00								
50	ATOM	746	C	TYR	304	14.886	27.530	84.432	1.00
	8.76								
	ATOM	747	O	TYR	304	14.244	26.497	84.245	1.00
	10.19								
	ATOM	748	N	ALA	305	15.007	28.085	85.626	1.00
	7.54								
55	ATOM	749	H	ALA	305	15.518	28.913	85.713	1.00
	0.00								
	ATOM	750	CA	ALA	305	14.432	27.492	86.836	1.00
	7.28								

	ATOM 7.36	751	CB	ALA	305	15.277	26.210	87.229	1.00
	ATOM 7.58	752	C	ALA	305	14.479	28.472	88.005	1.00
5	ATOM 7.76	753	O	ALA	305	15.133	29.507	87.920	1.00
	ATOM 6.33	754	N	VAL	306	13.877	28.072	89.125	0.75
10	ATOM 0.00	755	H	VAL	306	13.386	27.221	89.127	1.00
	ATOM 6.60	756	CA	VAL	306	13.908	28.858	90.345	0.75
	ATOM 7.65	757	CB	VAL	306	12.613	29.756	90.564	0.75
15	ATOM 8.43	758	CG1	VAL	306	12.500	30.825	89.493	0.75
	ATOM 8.63	759	CG2	VAL	306	11.329	28.906	90.578	0.75
20	ATOM 7.64	760	C	VAL	306	13.983	27.880	91.509	0.75
	ATOM 6.81	761	O	VAL	306	13.627	26.699	91.337	0.75
	ATOM 9.85	762	N	VAL	307	14.564	28.341	92.605	1.00
25	ATOM 0.00	763	H	VAL	307	14.951	29.233	92.585	1.00
	ATOM 11.28	764	CA	VAL	307	14.620	27.575	93.860	1.00
30	ATOM 11.93	765	CB	VAL	307	16.043	27.209	94.300	1.00
	ATOM 12.96	766	CG1	VAL	307	16.011	26.526	95.654	1.00
	ATOM 11.76	767	CG2	VAL	307	16.650	26.243	93.283	1.00
35	ATOM 13.39	768	C	VAL	307	14.013	28.581	94.817	1.00
	ATOM 12.71	769	O	VAL	307	14.649	29.603	95.136	1.00
40	ATOM 15.11	770	N	THR	308	12.790	28.294	95.284	1.00
	ATOM 0.00	771	H	THR	308	12.360	27.452	95.070	1.00
	ATOM 18.31	772	CA	THR	308	12.107	29.269	96.140	1.00
45	ATOM 19.28	773	CB	THR	308	10.638	29.453	95.709	1.00
	ATOM 19.76	774	OG1	THR	308	9.966	28.193	95.726	1.00
50	ATOM 0.00	775	HG1	THR	308	9.056	28.301	95.466	1.00
	ATOM 20.08	776	CG2	THR	308	10.559	30.056	94.312	1.00
	ATOM 20.02	777	C	THR	308	12.246	29.193	97.661	1.00
55	ATOM 21.39	778	O	THR	308	11.514	29.872	98.398	1.00
	ATOM 21.32	779	N	ALA	309	13.143	28.337	98.137	1.00

	ATOM 0.00	780	H	ALA	309	13.617	27.761	97.503	1.00
	ATOM 20.86	781	CA	ALA	309	13.454	28.233	99.561	1.00
5	ATOM 21.75	782	CB	ALA	309	13.646	26.766	99.968	1.00
	ATOM 21.92	783	C	ALA	309	14.754	29.016	99.768	1.00
10	ATOM 21.32	784	O	ALA	309	15.649	28.989	98.908	1.00
	ATOM 21.30	785	N	GLU	310	14.873	29.734	100.883	1.00
	ATOM 0.00	786	H	GLU	310	14.137	29.741	101.543	1.00
15	ATOM 22.49	787	CA	GLU	310	16.090	30.529	101.126	1.00
	ATOM 23.46	788	CB	GLU	310	15.886	31.446	102.349	1.00
20	ATOM 25.11	789	CG	GLU	310	14.771	32.487	102.104	1.00
	ATOM 26.08	790	CD	GLU	310	14.451	33.374	103.292	1.00
	ATOM 27.45	791	OE1	GLU	310	14.946	33.092	104.411	1.00
25	ATOM 27.13	792	OE2	GLU	310	13.643	34.314	103.123	1.00
	ATOM 22.09	793	C	GLU	310	17.389	29.683	101.245	1.00
30	ATOM 23.35	794	O	GLU	310	17.390	28.618	101.859	1.00
	ATOM 20.88	795	N	PRO	311	18.495	30.125	100.602	1.00
	ATOM 20.86	796	CD	PRO	311	19.781	29.396	100.672	1.00
35	ATOM 20.02	797	CA	PRO	311	18.626	31.337	99.782	1.00
	ATOM 20.24	798	CB	PRO	311	20.140	31.514	99.653	1.00
40	ATOM 21.06	799	CG	PRO	311	20.638	30.083	99.618	1.00
	ATOM 18.54	800	C	PRO	311	17.991	31.101	98.417	1.00
	ATOM 18.90	801	O	PRO	311	18.334	30.173	97.705	1.00
45	ATOM 15.99	802	N	ILE	312	17.156	32.032	98.027	1.00
	ATOM 0.00	803	H	ILE	312	17.013	32.821	98.586	1.00
50	ATOM 14.13	804	CA	ILE	312	16.428	31.941	96.785	1.00
	ATOM 15.35	805	CB	ILE	312	15.357	33.048	96.802	1.00
	ATOM 15.68	806	CG2	ILE	312	14.599	33.109	95.489	1.00
55	ATOM 17.79	807	CG1	ILE	312	14.445	32.807	98.025	1.00
	ATOM 19.19	808	CD1	ILE	312	13.416	33.839	98.227	1.00

5	ATOM 11.69	809	C	ILE	312	17.317	32.084	95.575	1.00
	ATOM 11.84	810	O	ILE	312	18.233	32.918	95.556	1.00
	ATOM 9.45	811	N	TYR	313	17.095	31.223	94.585	1.00
	ATOM 0.00	812	H	TYR	313	16.400	30.545	94.679	1.00
10	ATOM 8.37	813	CA	TYR	313	17.861	31.336	93.345	1.00
	ATOM 8.55	814	CB	TYR	313	18.624	30.041	93.016	1.00
	ATOM 12.63	815	CG	TYR	313	19.756	29.586	93.920	1.00
15	ATOM 12.91	816	CD1	TYR	313	20.370	30.425	94.826	1.00
	ATOM 14.23	817	CE1	TYR	313	21.426	29.985	95.632	1.00
20	ATOM 14.27	818	CD2	TYR	313	20.223	28.273	93.828	1.00
	ATOM 14.90	819	CE2	TYR	313	21.280	27.829	94.626	1.00
	ATOM 15.27	820	CZ	TYR	313	21.870	28.689	95.520	1.00
25	ATOM 17.23	821	OH	TYR	313	22.910	28.240	96.314	1.00
	ATOM 0.00	822	HH	TYR	313	23.083	27.319	96.125	1.00
30	ATOM 7.36	823	C	TYR	313	16.971	31.540	92.137	1.00
	ATOM 7.60	824	O	TYR	313	15.893	30.996	92.046	1.00
	ATOM 5.30	825	N	ILE	314	17.457	32.334	91.189	0.82
35	ATOM 0.00	826	H	ILE	314	18.265	32.853	91.366	1.00
	ATOM 5.28	827	CA	ILE	314	16.818	32.465	89.871	0.82
40	ATOM 3.82	828	CB	ILE	314	16.487	33.917	89.505	0.82
	ATOM 5.97	829	CG2	ILE	314	16.118	34.031	88.022	0.82
	ATOM 6.17	830	CG1	ILE	314	15.353	34.373	90.376	0.82
45	ATOM 6.59	831	CD1	ILE	314	15.075	35.885	90.228	0.82
	ATOM 5.34	832	C	ILE	314	17.912	31.956	88.901	0.82
50	ATOM 6.05	833	O	ILE	314	19.054	32.440	88.919	0.82
	ATOM 4.96	834	N	ILE	315	17.590	30.941	88.112	1.00
	ATOM 0.00	835	H	ILE	315	16.681	30.583	88.145	1.00
55	ATOM 5.21	836	CA	ILE	315	18.555	30.342	87.177	1.00
	ATOM 6.45	837	CB	ILE	315	18.584	28.786	87.389	1.00

	ATOM 6.91	838	CG2	ILE	315	19.648	28.161	86.489	1.00
	ATOM 7.39	839	CG1	ILE	315	18.938	28.480	88.858	1.00
5	ATOM 8.45	840	CD1	ILE	315	17.755	28.248	89.842	1.00
	ATOM 5.40	841	C	ILE	315	18.159	30.700	85.767	1.00
10	ATOM 4.96	842	O	ILE	315	16.995	30.576	85.409	1.00
	ATOM 5.62	843	N	THR	316	19.129	31.176	84.970	1.00
	ATOM 0.00	844	H	THR	316	20.044	31.248	85.291	1.00
15	ATOM 5.76	845	CA	THR	316	18.824	31.575	83.615	1.00
	ATOM 8.03	846	CB	THR	316	18.829	33.131	83.474	1.00
20	ATOM 9.42	847	OG1	THR	316	20.137	33.649	83.793	1.00
	ATOM 0.00	848	HG1	THR	316	20.126	34.596	83.708	1.00
	ATOM 7.19	849	CG2	THR	316	17.897	33.731	84.491	1.00
25	ATOM 5.99	850	C	THR	316	19.792	31.052	82.580	1.00
	ATOM 5.90	851	O	THR	316	20.860	30.501	82.906	1.00
30	ATOM 5.22	852	N	GLU	317	19.445	31.314	81.342	1.00
	ATOM 0.00	853	H	GLU	317	18.592	31.745	81.162	1.00
	ATOM 5.30	854	CA	GLU	317	20.295	30.965	80.189	1.00
35	ATOM 5.70	855	CB	GLU	317	19.618	31.546	78.960	1.00
	ATOM 6.11	856	CG	GLU	317	20.307	31.327	77.643	1.00
40	ATOM 6.55	857	CD	GLU	317	19.459	31.830	76.475	1.00
	ATOM 6.40	858	OE1	GLU	317	18.499	32.609	76.703	1.00
	ATOM 7.06	859	OE2	GLU	317	19.715	31.435	75.323	1.00
45	ATOM 7.29	860	C	GLU	317	21.690	31.631	80.355	1.00
	ATOM 8.69	861	O	GLU	317	21.794	32.837	80.668	1.00
50	ATOM 6.02	862	N	TYR	318	22.754	30.866	80.133	1.00
	ATOM 0.00	863	H	TYR	318	22.648	29.938	79.891	1.00
	ATOM 5.54	864	CA	TYR	318	24.114	31.411	80.272	1.00
55	ATOM 6.33	865	CB	TYR	318	25.078	30.268	80.623	1.00
	ATOM 7.47	866	CG	TYR	318	26.452	30.764	81.010	1.00

	ATOM 10.12	867	CD1	TYR	318	26.643	31.354	82.258	1.00
	ATOM 13.41	868	CE1	TYR	318	27.862	31.866	82.636	1.00
5	ATOM 9.46	869	CD2	TYR	318	27.509	30.672	80.143	1.00
	ATOM 11.26	870	CE2	TYR	318	28.766	31.208	80.518	1.00
10	ATOM 12.20	871	CZ	TYR	318	28.909	31.787	81.756	1.00
	ATOM 16.24	872	OH	TYR	318	30.143	32.302	82.179	1.00
	ATOM 0.00	873	HH	TYR	318	30.059	32.690	83.047	1.00
15	ATOM 5.01	874	C	TYR	318	24.554	32.041	78.950	1.00
	ATOM 5.85	875	O	TYR	318	24.367	31.482	77.835	1.00
20	ATOM 5.48	876	N	MET	319	25.165	33.233	79.080	1.00
	ATOM 0.00	877	H	MET	319	25.292	33.625	79.961	1.00
	ATOM 5.51	878	CA	MET	319	25.612	33.975	77.904	1.00
25	ATOM 6.85	879	CB	MET	319	24.888	35.332	77.889	1.00
	ATOM 8.12	880	CG	MET	319	23.344	35.195	77.705	1.00
30	ATOM 11.98	881	SD	MET	319	22.849	34.471	76.173	1.00
	ATOM 9.53	882	CE	MET	319	23.062	35.837	75.041	1.00
	ATOM 5.87	883	C	MET	319	27.129	34.107	78.064	1.00
35	ATOM 7.09	884	O	MET	319	27.615	34.858	78.897	1.00
	ATOM 6.56	885	N	GLU	320	27.858	33.407	77.216	1.00
40	ATOM 0.00	886	H	GLU	320	27.431	32.956	76.453	1.00
	ATOM 7.66	887	CA	GLU	320	29.299	33.269	77.406	1.00
	ATOM 10.83	888	CB	GLU	320	29.898	32.327	76.362	1.00
45	ATOM 16.03	889	CG	GLU	320	31.367	31.957	76.669	1.00
	ATOM 19.05	890	CD	GLU	320	31.475	31.047	77.891	1.00
50	ATOM 22.54	891	OE1	GLU	320	30.758	30.025	77.939	1.00
	ATOM 23.91	892	OE2	GLU	320	32.235	31.369	78.834	1.00
	ATOM 7.80	893	C	GLU	320	30.115	34.513	77.416	1.00
55	ATOM 9.31	894	O	GLU	320	31.104	34.568	78.145	1.00
	ATOM 6.37	895	N	ASN	321	29.705	35.490	76.621	1.00

	ATOM	896	H	ASN	321	28.871	35.388	76.113	1.00
	0.00								
	ATOM	897	CA	ASN	321	30.480	36.722	76.512	1.00
	6.88								
5	ATOM	898	CB	ASN	321	30.615	37.140	75.058	1.00
	6.80								
	ATOM	899	CG	ASN	321	31.689	36.332	74.348	1.00
	8.90								
10	ATOM	900	OD1	ASN	321	32.864	36.282	74.820	1.00
	9.89								
	ATOM	901	ND2	ASN	321	31.354	35.755	73.224	1.00
	9.37								
	ATOM	902	HD21	ASN	321	30.446	35.848	72.879	1.00
	0.00								
15	ATOM	903	HD22	ASN	321	32.049	35.235	72.766	1.00
	0.00								
	ATOM	904	C	ASN	321	30.011	37.837	77.428	1.00
	6.75								
	ATOM	905	O	ASN	321	30.506	38.975	77.292	1.00
20	8.29								
	ATOM	906	N	GLY	322	29.095	37.528	78.344	1.00
	5.34								
	ATOM	907	H	GLY	322	28.692	36.642	78.339	1.00
	0.00								
25	ATOM	908	CA	GLY	322	28.722	38.495	79.367	1.00
	5.22								
	ATOM	909	C	GLY	322	28.008	39.730	78.849	1.00
	4.77								
	ATOM	910	O	GLY	322	27.372	39.690	77.799	1.00
30	6.29								
	ATOM	911	N	SER	323	28.143	40.835	79.574	0.43
	2.00								
	ATOM	912	H	SER	323	28.719	40.843	80.360	1.00
	0.00								
35	ATOM	913	CA	SER	323	27.423	42.054	79.182	0.43
	2.00								
	ATOM	914	CB	SER	323	27.333	43.044	80.361	0.43
	2.00								
	ATOM	915	OG	SER	323	26.946	42.392	81.552	0.43
40	6.27								
	ATOM	916	HG	SER	323	27.645	41.822	81.868	1.00
	0.00								
	ATOM	917	C	SER	323	28.091	42.710	77.994	0.43
	2.00								
45	ATOM	918	O	SER	323	29.304	42.734	77.877	0.43
	2.00								
	ATOM	919	N	LEU	324	27.267	43.285	77.135	1.00
	3.87								
	ATOM	920	H	LEU	324	26.301	43.285	77.318	1.00
50	0.00								
	ATOM	921	CA	LEU	324	27.726	43.918	75.930	1.00
	4.10								
	ATOM	922	CB	LEU	324	26.494	44.494	75.178	1.00
	4.53								
55	ATOM	923	CG	LEU	324	26.823	45.237	73.867	1.00
	4.60								
	ATOM	924	CD1	LEU	324	27.447	44.359	72.828	1.00
	5.61								



	ATOM	925	CD2	LEU	324	25.467	45.865	73.307	1.00
	6.42								
	ATOM	926	C	LEU	324	28.697	45.076	76.272	1.00
	5.16								
5	ATOM	927	O	LEU	324	29.666	45.282	75.511	1.00
	5.89								
	ATOM	928	N	VAL	325	28.386	45.855	77.306	1.00
	6.46								
	ATOM	929	H	VAL	325	27.573	45.668	77.824	1.00
10	0.00								
	ATOM	930	CA	VAL	325	29.240	47.000	77.669	1.00
	8.87								
	ATOM	931	CB	VAL	325	28.594	47.840	78.795	1.00
	8.19								
15	ATOM	932	CG1	VAL	325	28.717	47.195	80.138	1.00
	8.51								
	ATOM	933	CG2	VAL	325	29.247	49.268	78.848	1.00
	11.08								
	ATOM	934	C	VAL	325	30.653	46.530	77.989	1.00
20	9.20								
	ATOM	935	O	VAL	325	31.614	47.255	77.670	1.00
	11.08								
	ATOM	936	N	ASP	326	30.798	45.323	78.552	1.00
	8.70								
25	ATOM	937	H	ASP	326	30.003	44.804	78.767	1.00
	0.00								
	ATOM	938	CA	ASP	326	32.125	44.776	78.853	1.00
	8.66								
	ATOM	939	CB	ASP	326	32.033	43.765	79.992	1.00
30	11.02								
	ATOM	940	CG	ASP	326	31.631	44.377	81.309	1.00
	14.01								
	ATOM	941	OD1	ASP	326	32.006	45.532	81.614	1.00
	15.85								
35	ATOM	942	OD2	ASP	326	30.940	43.688	82.095	1.00
	16.51								
	ATOM	943	C	ASP	326	32.740	44.091	77.626	1.00
	7.60								
	ATOM	944	O	ASP	326	33.933	44.221	77.324	1.00
40	8.08								
	ATOM	945	N	PHE	327	31.911	43.400	76.853	1.00
	5.80								
	ATOM	946	H	PHE	327	30.967	43.364	77.068	1.00
	0.00								
45	ATOM	947	CA	PHE	327	32.412	42.674	75.693	1.00
	4.85								
	ATOM	948	CB	PHE	327	31.272	41.827	75.089	1.00
	4.73								
	ATOM	949	CG	PHE	327	31.670	41.144	73.836	1.00
50	7.13								
	ATOM	950	CD1	PHE	327	32.580	40.068	73.870	1.00
	6.58								
	ATOM	951	CD2	PHE	327	31.242	41.615	72.603	1.00
	6.43								
55	ATOM	952	CE1	PHE	327	33.025	39.514	72.679	1.00
	8.02								
	ATOM	953	CE2	PHE	327	31.691	41.057	71.426	1.00
	8.54								

	ATOM 9.43	954	CZ	PHE	327	32.602	39.986	71.473	1.00
	ATOM 4.40	955	C	PHE	327	33.044	43.581	74.630	1.00
5	ATOM 5.80	956	O	PHE	327	34.078	43.278	74.031	1.00
	ATOM 2.00	957	N	LEU	328	32.413	44.736	74.421	0.40
10	ATOM 0.00	958	H	LEU	328	31.613	44.967	74.941	1.00
	ATOM 2.00	959	CA	LEU	328	32.891	45.667	73.412	0.40
	ATOM 2.00	960	CB	LEU	328	31.909	46.819	73.264	0.40
15	ATOM 2.00	961	CG	LEU	328	30.604	46.413	72.573	0.40
	ATOM 4.11	962	CD1	LEU	328	29.676	47.610	72.679	0.40
20	ATOM 3.16	963	CD2	LEU	328	30.861	46.004	71.134	0.40
	ATOM 2.00	964	C	LEU	328	34.267	46.218	73.721	0.40
	ATOM 2.00	965	O	LEU	328	34.888	46.790	72.832	0.40
25	ATOM 6.15	966	N	LYS	329	34.707	46.049	74.966	1.00
	ATOM 0.00	967	H	LYS	329	34.127	45.597	75.611	1.00
30	ATOM 7.57	968	CA	LYS	329	36.042	46.538	75.410	1.00
	ATOM 9.39	969	CB	LYS	329	35.972	47.085	76.825	1.00
	ATOM 10.53	970	CG	LYS	329	35.055	48.293	76.956	1.00
35	ATOM 12.08	971	CD	LYS	329	35.034	48.771	78.369	1.00
	ATOM 14.72	972	CE	LYS	329	33.924	49.783	78.604	1.00
40	ATOM 17.45	973	NZ	LYS	329	33.813	50.022	80.065	1.00
	ATOM 0.00	974	HZ1	LYS	329	34.725	50.386	80.430	1.00
	ATOM 0.00	975	HZ2	LYS	329	33.609	49.124	80.554	1.00
45	ATOM 0.00	976	HZ3	LYS	329	33.073	50.696	80.273	1.00
	ATOM 9.59	977	C	LYS	329	37.121	45.460	75.332	1.00
50	ATOM 12.01	978	O	LYS	329	38.304	45.760	75.515	1.00
	ATOM 8.85	979	N	THR	330	36.727	44.203	75.186	1.00
	ATOM 0.00	980	H	THR	330	35.777	43.995	75.152	1.00
55	ATOM 9.09	981	CA	THR	330	37.733	43.124	75.084	1.00
	ATOM 8.50	982	CB	THR	330	37.013	41.756	75.236	1.00

	ATOM 9.34	983	OG1	THR	330	36.187	41.541	74.094	1.00
	ATOM 0.00	984	HG1	THR	330	35.742	40.698	74.178	1.00
5	ATOM 10.85	985	CG2	THR	330	36.275	41.705	76.534	1.00
	ATOM 8.83	986	C	THR	330	38.400	43.168	73.699	1.00
10	ATOM 8.36	987	O	THR	330	37.948	43.804	72.771	1.00
	ATOM 9.77	988	N	PRO	331	39.528	42.451	73.511	1.00
	ATOM 9.22	989	CD	PRO	331	40.331	41.767	74.521	1.00
15	ATOM 10.20	990	CA	PRO	331	40.169	42.453	72.195	1.00
	ATOM 9.14	991	CB	PRO	331	41.304	41.427	72.382	1.00
20	ATOM 8.46	992	CG	PRO	331	41.688	41.634	73.771	1.00
	ATOM 11.30	993	C	PRO	331	39.251	42.048	71.037	1.00
	ATOM 12.41	994	O	PRO	331	39.314	42.623	69.952	1.00
25	ATOM 11.84	995	N	SER	332	38.424	41.026	71.272	1.00
	ATOM 0.00	996	H	SER	332	38.455	40.584	72.144	1.00
30	ATOM 13.69	997	CA	SER	332	37.483	40.542	70.269	1.00
	ATOM 15.15	998	CB	SER	332	36.732	39.300	70.805	1.00
	ATOM 19.85	999	OG	SER	332	37.613	38.194	70.960	1.00
35	ATOM 0.00	1000	HG	SER	332	37.137	37.436	71.296	1.00
	ATOM 13.44	1001	C	SER	332	36.462	41.632	69.986	1.00
40	ATOM 14.86	1002	O	SER	332	36.191	41.946	68.825	1.00
	ATOM 11.92	1003	N	GLY	333	35.990	42.268	71.047	1.00
	ATOM 0.00	1004	H	GLY	333	36.314	42.035	71.940	1.00
45	ATOM 11.53	1005	CA	GLY	333	34.997	43.333	70.888	1.00
	ATOM 11.96	1006	C	GLY	333	35.575	44.519	70.120	1.00
50	ATOM 11.03	1007	O	GLY	333	34.911	45.094	69.240	1.00
	ATOM 11.99	1008	N	ILE	334	36.797	44.903	70.471	1.00
	ATOM 0.00	1009	H	ILE	334	37.279	44.425	71.166	1.00
55	ATOM 13.87	1010	CA	ILE	334	37.443	46.025	69.790	1.00
	ATOM 13.07	1011	CB	ILE	334	38.796	46.304	70.469	1.00

	ATOM 13.30	1012	CG2	ILE	334	39.668	47.275	69.591	1.00
	ATOM 13.93	1013	CG1	ILE	334	38.540	46.807	71.885	1.00
5	ATOM 16.85	1014	CD1	ILE	334	39.823	46.948	72.735	1.00
	ATOM 14.82	1015	C	ILE	334	37.616	45.791	68.283	1.00
10	ATOM 16.68	1016	O	ILE	334	37.479	46.715	67.484	1.00
	ATOM 14.68	1017	N	LYS	335	37.793	44.551	67.856	1.00
	ATOM 0.00	1018	H	LYS	335	37.797	43.806	68.481	1.00
15	ATOM 15.73	1019	CA	LYS	335	37.985	44.319	66.427	1.00
	ATOM 17.96	1020	CB	LYS	335	38.809	43.057	66.222	1.00
20	ATOM 20.04	1021	CG	LYS	335	40.132	43.083	66.978	1.00
	ATOM 22.10	1022	CD	LYS	335	40.829	41.736	66.884	1.00
	ATOM 24.01	1023	CE	LYS	335	42.093	41.738	67.703	1.00
25	ATOM 24.11	1024	NZ	LYS	335	42.309	40.417	68.327	1.00
	ATOM 0.00	1025	HZ1	LYS	335	42.361	39.679	67.590	1.00
30	ATOM 0.00	1026	HZ2	LYS	335	41.507	40.217	68.952	1.00
	ATOM 0.00	1027	HZ3	LYS	335	43.165	40.435	68.859	1.00
	ATOM 15.48	1028	C	LYS	335	36.698	44.249	65.595	1.00
35	ATOM 15.26	1029	O	LYS	335	36.747	44.062	64.372	1.00
	ATOM 14.77	1030	N	LEU	336	35.541	44.409	66.242	1.00
40	ATOM 0.00	1031	H	LEU	336	35.513	44.579	67.208	1.00
	ATOM 13.70	1032	CA	LEU	336	34.296	44.313	65.460	1.00
	ATOM 14.27	1033	CB	LEU	336	33.082	44.291	66.380	1.00
45	ATOM 15.32	1034	CG	LEU	336	33.028	43.099	67.363	1.00
	ATOM 15.81	1035	CD1	LEU	336	31.767	43.228	68.222	1.00
50	ATOM 16.91	1036	CD2	LEU	336	33.067	41.753	66.636	1.00
	ATOM 13.32	1037	C	LEU	336	34.122	45.410	64.448	1.00
	ATOM 15.25	1038	O	LEU	336	34.392	46.582	64.763	1.00
55	ATOM 12.95	1039	N	THR	337	33.599	45.033	63.280	1.00
	ATOM 0.00	1040	H	THR	337	33.359	44.105	63.153	1.00

	ATOM 11.61	1041	CA	THR	337	33.353	45.967	62.202	1.00
	ATOM 11.98	1042	CB	THR	337	33.161	45.237	60.836	1.00
5	ATOM 12.22	1043	OG1	THR	337	32.050	44.309	60.907	1.00
	ATOM 0.00	1044	HG1	THR	337	31.248	44.779	61.143	1.00
10	ATOM 13.51	1045	CG2	THR	337	34.450	44.424	60.453	1.00
	ATOM 10.80	1046	C	THR	337	32.064	46.729	62.483	1.00
	ATOM 9.51	1047	O	THR	337	31.255	46.279	63.309	1.00
15	ATOM 9.90	1048	N	ILE	338	31.890	47.892	61.843	1.00
	ATOM 0.00	1049	H	ILE	338	32.595	48.249	61.262	1.00
20	ATOM 9.68	1050	CA	ILE	338	30.642	48.642	62.011	1.00
	ATOM 10.93	1051	CB	ILE	338	30.677	50.012	61.253	1.00
	ATOM 12.49	1052	CG2	ILE	338	30.808	49.794	59.770	1.00
25	ATOM 12.18	1053	CG1	ILE	338	29.417	50.842	61.559	1.00
	ATOM 11.90	1054	CD1	ILE	338	29.136	51.150	63.028	1.00
30	ATOM 9.09	1055	C	ILE	338	29.464	47.740	61.567	1.00
	ATOM 9.09	1056	O	ILE	338	28.409	47.791	62.162	1.00
	ATOM 8.89	1057	N	ASN	339	29.659	46.905	60.551	1.00
35	ATOM 0.00	1058	H	ASN	339	30.527	46.858	60.092	1.00
	ATOM 10.04	1059	CA	ASN	339	28.595	46.012	60.093	1.00
40	ATOM 14.13	1060	CB	ASN	339	29.121	45.182	58.914	1.00
	ATOM 19.41	1061	CG	ASN	339	28.369	43.872	58.706	1.00
	ATOM 24.95	1062	OD1	ASN	339	27.830	43.641	57.641	1.00
45	ATOM 24.26	1063	ND2	ASN	339	28.340	43.013	59.728	1.00
	ATOM 0.00	1064	HD21	ASN	339	28.774	43.262	60.586	1.00
50	ATOM 0.00	1065	HD22	ASN	339	27.885	42.176	59.646	1.00
	ATOM 8.87	1066	C	ASN	339	28.169	45.097	61.245	1.00
	ATOM 7.55	1067	O	ASN	339	26.975	44.847	61.433	1.00
55	ATOM 7.56	1068	N	LYS	340	29.133	44.511	61.967	1.00
	ATOM 0.00	1069	H	LYS	340	30.077	44.690	61.773	1.00

	ATOM 6.70	1070	CA	LYS	340	28.726	43.588	63.029	1.00
	ATOM 5.88	1071	CB	LYS	340	29.915	42.776	63.573	1.00
5	ATOM 6.19	1072	CG	LYS	340	29.586	41.835	64.698	1.00
	ATOM 6.70	1073	CD	LYS	340	28.473	40.804	64.263	1.00
10	ATOM 7.59	1074	CE	LYS	340	28.199	39.920	65.468	1.00
	ATOM 9.23	1075	NZ	LYS	340	27.010	38.984	65.151	1.00
	ATOM 0.00	1076	HZ1	LYS	340	27.244	38.385	64.353	1.00
15	ATOM 0.00	1077	HZ2	LYS	340	26.167	39.561	64.935	1.00
	ATOM 0.00	1078	HZ3	LYS	340	26.803	38.402	65.992	1.00
20	ATOM 6.91	1079	C	LYS	340	28.046	44.352	64.150	1.00
	ATOM 7.61	1080	O	LYS	340	27.097	43.838	64.795	1.00
	ATOM 5.67	1081	N	LEU	341	28.526	45.576	64.420	1.00
25	ATOM 0.00	1082	H	LEU	341	29.266	45.945	63.925	1.00
	ATOM 5.04	1083	CA	LEU	341	27.903	46.378	65.460	1.00
30	ATOM 6.51	1084	CB	LEU	341	28.692	47.686	65.712	1.00
	ATOM 7.32	1085	CG	LEU	341	30.121	47.465	66.221	1.00
	ATOM 8.50	1086	CD1	LEU	341	30.775	48.870	66.357	1.00
35	ATOM 8.70	1087	CD2	LEU	341	30.140	46.820	67.570	1.00
	ATOM 4.38	1088	C	LEU	341	26.437	46.699	65.075	1.00
40	ATOM 5.27	1089	O	LEU	341	25.582	46.706	65.945	1.00
	ATOM 5.97	1090	N	LEU	342	26.176	46.960	63.798	1.00
	ATOM 0.00	1091	H	LEU	342	26.913	46.945	63.154	1.00
45	ATOM 4.84	1092	CA	LEU	342	24.816	47.279	63.312	1.00
	ATOM 6.19	1093	CB	LEU	342	24.850	47.754	61.845	1.00
50	ATOM 8.40	1094	CG	LEU	342	25.448	49.182	61.674	1.00
	ATOM 9.05	1095	CD1	LEU	342	25.731	49.410	60.184	1.00
	ATOM 10.59	1096	CD2	LEU	342	24.536	50.273	62.284	1.00
55	ATOM 6.56	1097	C	LEU	342	23.957	46.020	63.435	1.00
	ATOM 6.05	1098	O	LEU	342	22.808	46.088	63.844	1.00

	ATOM 6.36	1099	N	ASP	343	24.562	44.872	63.129	1.00
	ATOM 0.00	1100	H	ASP	343	25.477	44.873	62.804	1.00
5	ATOM 6.77	1101	CA	ASP	343	23.846	43.589	63.289	1.00
	ATOM 5.62	1102	CB	ASP	343	24.814	42.473	62.870	1.00
10	ATOM 7.43	1103	CG	ASP	343	24.355	41.091	63.252	1.00
	ATOM 8.26	1104	OD1	ASP	343	23.150	40.853	63.435	1.00
	ATOM 9.00	1105	OD2	ASP	343	25.262	40.231	63.270	1.00
15	ATOM 5.67	1106	C	ASP	343	23.417	43.439	64.747	1.00
	ATOM 6.41	1107	O	ASP	343	22.232	43.177	65.021	1.00
20	ATOM 5.54	1108	N	MET	344	24.343	43.555	65.699	1.00
	ATOM 0.00	1109	H	MET	344	25.277	43.704	65.454	1.00
	ATOM 6.12	1110	CA	MET	344	24.003	43.452	67.114	1.00
25	ATOM 8.61	1111	CB	MET	344	25.242	43.644	67.977	1.00
	ATOM 9.80	1112	CG	MET	344	26.221	42.513	67.682	1.00
30	ATOM 17.00	1113	SD	MET	344	27.833	42.796	68.536	1.00
	ATOM 16.18	1114	CE	MET	344	27.976	41.510	69.671	1.00
	ATOM 5.89	1115	C	MET	344	22.911	44.461	67.503	1.00
35	ATOM 5.58	1116	O	MET	344	22.029	44.124	68.265	1.00
	ATOM 4.96	1117	N	ALA	345	23.003	45.696	66.990	1.00
40	ATOM 0.00	1118	H	ALA	345	23.774	45.923	66.423	1.00
	ATOM 4.58	1119	CA	ALA	345	21.995	46.729	67.266	1.00
	ATOM 5.20	1120	CB	ALA	345	22.376	48.034	66.577	1.00
45	ATOM 4.22	1121	C	ALA	345	20.603	46.244	66.804	1.00
	ATOM 5.43	1122	O	ALA	345	19.646	46.454	67.563	1.00
50	ATOM 3.54	1123	N	ALA	346	20.525	45.688	65.597	1.00
	ATOM 0.00	1124	H	ALA	346	21.323	45.645	65.043	1.00
	ATOM 4.63	1125	CA	ALA	346	19.257	45.140	65.059	1.00
55	ATOM 4.56	1126	CB	ALA	346	19.442	44.694	63.647	1.00
	ATOM 4.94	1127	C	ALA	346	18.769	43.992	65.925	1.00

	ATOM	1128	O	ALA	346	17.562	43.865	66.158	1.00
	4.62								
	ATOM	1129	N	GLN	347	19.691	43.149	66.415	1.00
	4.26								
5	ATOM	1130	H	GLN	347	20.630	43.255	66.203	1.00
	0.00								
	ATOM	1131	CA	GLN	347	19.253	42.039	67.287	1.00
	4.61								
10	ATOM	1132	CB	GLN	347	20.437	41.123	67.668	1.00
	4.27								
	ATOM	1133	CG	GLN	347	21.120	40.527	66.475	1.00
	5.36								
	ATOM	1134	CD	GLN	347	22.162	39.471	66.822	1.00
	5.82								
15	ATOM	1135	OE1	GLN	347	22.130	38.918	67.891	1.00
	7.06								
	ATOM	1136	NE2	GLN	347	23.104	39.223	65.904	1.00
	6.44								
	ATOM	1137	HE21	GLN	347	23.095	39.715	65.057	1.00
20	0.00								
	ATOM	1138	HE22	GLN	347	23.763	38.532	66.098	1.00
	0.00								
	ATOM	1139	C	GLN	347	18.558	42.542	68.524	1.00
	5.59								
25	ATOM	1140	O	GLN	347	17.563	41.999	68.987	1.00
	6.38								
	ATOM	1141	N	ILE	348	19.117	43.599	69.129	1.00
	4.36								
	ATOM	1142	H	ILE	348	19.933	43.999	68.752	1.00
30	0.00								
	ATOM	1143	CA	ILE	348	18.547	44.163	70.321	1.00
	4.40								
	ATOM	1144	CB	ILE	348	19.507	45.237	70.885	1.00
	4.00								
35	ATOM	1145	CG2	ILE	348	18.896	45.944	72.083	1.00
	5.56								
	ATOM	1146	CG1	ILE	348	20.815	44.547	71.279	1.00
	3.40								
	ATOM	1147	CD1	ILE	348	21.972	45.521	71.478	1.00
40	5.25								
	ATOM	1148	C	ILE	348	17.192	44.797	69.974	1.00
	3.38								
	ATOM	1149	O	ILE	348	16.287	44.658	70.794	1.00
	4.01								
45	ATOM	1150	N	ALA	349	17.111	45.518	68.857	1.00
	4.79								
	ATOM	1151	H	ALA	349	17.902	45.617	68.285	1.00
	0.00								
	ATOM	1152	CA	ALA	349	15.827	46.147	68.447	1.00
50	3.81								
	ATOM	1153	CB	ALA	349	15.972	46.914	67.148	1.00
	4.46								
	ATOM	1154	C	ALA	349	14.788	45.007	68.242	1.00
	4.00								
55	ATOM	1155	O	ALA	349	13.606	45.193	68.604	1.00
	4.66								
	ATOM	1156	N	GLU	350	15.226	43.862	67.717	1.00
	5.02								



	ATOM 0.00	1157	H	GLU	350	16.162	43.769	67.465	1.00
	ATOM 4.86	1158	CA	GLU	350	14.295	42.747	67.499	1.00
5	ATOM 5.41	1159	CB	GLU	350	15.011	41.626	66.771	1.00
	ATOM 7.13	1160	CG	GLU	350	14.139	40.436	66.419	1.00
10	ATOM 10.34	1161	CD	GLU	350	14.948	39.349	65.710	1.00
	ATOM 10.86	1162	OE1	GLU	350	15.991	39.637	65.025	1.00
	ATOM 12.13	1163	OE2	GLU	350	14.466	38.181	65.764	1.00
15	ATOM 5.26	1164	C	GLU	350	13.768	42.243	68.854	1.00
	ATOM 5.78	1165	O	GLU	350	12.563	41.921	68.985	1.00
20	ATOM 3.72	1166	N	GLY	351	14.641	42.113	69.868	1.00
	ATOM 0.00	1167	H	GLY	351	15.593	42.271	69.705	1.00
	ATOM 3.50	1168	CA	GLY	351	14.167	41.705	71.183	1.00
25	ATOM 4.23	1169	C	GLY	351	13.200	42.739	71.741	1.00
	ATOM 5.58	1170	O	GLY	351	12.202	42.405	72.322	1.00
30	ATOM 3.47	1171	N	MET	352	13.560	44.009	71.611	1.00
	ATOM 0.00	1172	H	MET	352	14.420	44.241	71.190	1.00
	ATOM 3.42	1173	CA	MET	352	12.665	45.019	72.130	1.00
35	ATOM 2.72	1174	CB	MET	352	13.342	46.392	72.110	1.00
	ATOM 5.58	1175	CG	MET	352	14.467	46.506	73.158	1.00
40	ATOM 5.58	1176	SD	MET	352	14.003	46.180	74.852	1.00
	ATOM 7.43	1177	CE	MET	352	12.489	47.318	75.041	1.00
	ATOM 3.73	1178	C	MET	352	11.337	45.091	71.369	1.00
45	ATOM 4.83	1179	O	MET	352	10.372	45.485	72.023	1.00
	ATOM 4.70	1180	N	ALA	353	11.275	44.680	70.093	1.00
50	ATOM 0.00	1181	H	ALA	353	12.092	44.390	69.637	1.00
	ATOM 3.95	1182	CA	ALA	353	10.014	44.713	69.327	1.00
	ATOM 5.05	1183	CB	ALA	353	10.251	44.482	67.888	1.00
55	ATOM 5.68	1184	C	ALA	353	9.116	43.633	69.914	1.00
	ATOM 5.65	1185	O	ALA	353	7.888	43.816	69.920	1.00

	ATOM	1186	N	PHE	354	9.703	42.527	70.378	1.00
	5.57								
	ATOM	1187	H	PHE	354	10.677	42.415	70.297	1.00
	0.00								
5	ATOM	1188	CA	PHE	354	8.871	41.487	71.010	1.00
	5.74								
	ATOM	1189	CB	PHE	354	9.690	40.193	71.276	1.00
	5.64								
10	ATOM	1190	CG	PHE	354	8.963	39.190	72.137	1.00
	7.49								
	ATOM	1191	CD1	PHE	354	7.954	38.421	71.583	1.00
	9.77								
	ATOM	1192	CD2	PHE	354	9.284	39.033	73.477	1.00
	7.95								
15	ATOM	1193	CE1	PHE	354	7.269	37.494	72.416	1.00
	7.85								
	ATOM	1194	CE2	PHE	354	8.600	38.106	74.307	1.00
	10.41								
	ATOM	1195	CZ	PHE	354	7.606	37.365	73.731	1.00
20	8.21								
	ATOM	1196	C	PHE	354	8.262	42.040	72.300	1.00
	5.21								
	ATOM	1197	O	PHE	354	7.074	41.882	72.542	1.00
	6.94								
25	ATOM	1198	N	ILE	355	9.066	42.707	73.146	1.00
	3.91								
	ATOM	1199	H	ILE	355	10.007	42.832	72.897	1.00
	0.00								
	ATOM	1200	CA	ILE	355	8.624	43.274	74.422	1.00
30	4.64								
	ATOM	1201	CB	ILE	355	9.858	43.897	75.121	1.00
	4.64								
	ATOM	1202	CG2	ILE	355	9.429	44.817	76.257	1.00
	5.51								
35	ATOM	1203	CG1	ILE	355	10.689	42.748	75.698	1.00
	5.02								
	ATOM	1204	CD1	ILE	355	12.039	43.225	76.336	1.00
	5.07								
	ATOM	1205	C	ILE	355	7.507	44.302	74.145	1.00
40	5.18								
	ATOM	1206	O	ILE	355	6.471	44.277	74.821	1.00
	6.36								
	ATOM	1207	N	GLU	356	7.688	45.052	73.072	1.00
	5.48								
45	ATOM	1208	H	GLU	356	8.499	44.926	72.549	1.00
	0.00								
	ATOM	1209	CA	GLU	356	6.730	46.066	72.633	1.00
	5.56								
	ATOM	1210	CB	GLU	356	7.309	46.792	71.413	1.00
50	6.65								
	ATOM	1211	CG	GLU	356	6.392	47.776	70.567	1.00
	9.77								
	ATOM	1212	CD	GLU	356	7.256	48.348	69.382	1.00
	11.17								
55	ATOM	1213	OE1	GLU	356	7.380	47.805	68.206	1.00
	14.46								
	ATOM	1214	OE2	GLU	356	7.863	49.347	69.707	1.00
	13.36								

	ATOM	1215	C	GLU	356	5.411	45.370	72.284	1.00
	5.36								
	ATOM	1216	O	GLU	356	4.348	45.812	72.733	1.00
	6.62								
5	ATOM	1217	N	GLU	357	5.482	44.359	71.428	0.36
	2.07								
	ATOM	1218	H	GLU	357	6.356	44.046	71.111	1.00
	0.00								
10	ATOM	1219	CA	GLU	357	4.260	43.690	70.981	0.36
	2.00								
	ATOM	1220	CB	GLU	357	4.593	42.734	69.845	0.36
	3.32								
	ATOM	1221	CG	GLU	357	3.419	41.918	69.332	0.36
	6.37								
15	ATOM	1222	CD	GLU	357	3.244	40.629	70.091	0.36
	9.12								
	ATOM	1223	OE1	GLU	357	4.082	40.326	70.953	0.36
	10.81								
20	ATOM	1224	OE2	GLU	357	2.264	39.897	69.841	0.36
	12.28								
	ATOM	1225	C	GLU	357	3.495	43.010	72.096	0.36
	2.09								
	ATOM	1226	O	GLU	357	2.254	42.897	72.064	0.36
	2.00								
25	ATOM	1227	N	ARG	358	4.215	42.578	73.112	1.00
	5.24								
	ATOM	1228	H	ARG	358	5.184	42.724	73.114	1.00
	0.00								
30	ATOM	1229	CA	ARG	358	3.568	41.888	74.246	1.00
	6.65								
	ATOM	1230	CB	ARG	358	4.542	40.861	74.891	1.00
	9.04								
	ATOM	1231	CG	ARG	358	5.014	39.746	73.965	1.00
	10.38								
35	ATOM	1232	CD	ARG	358	3.832	38.910	73.377	1.00
	13.95								
	ATOM	1233	NE	ARG	358	2.952	38.513	74.438	1.00
	17.47								
40	ATOM	1234	HE	ARG	358	3.314	38.471	75.342	1.00
	0.00								
	ATOM	1235	CZ	ARG	358	1.678	38.213	74.227	1.00
	17.45								
	ATOM	1236	NH1	ARG	358	1.200	38.277	72.985	1.00
	19.34								
45	ATOM	1237	HH11	ARG	358	1.801	38.543	72.242	1.00
	0.00								
	ATOM	1238	HH12	ARG	358	0.241	38.050	72.811	1.00
	0.00								
	ATOM	1239	NH2	ARG	358	0.897	37.937	75.262	1.00
50	19.28								
	ATOM	1240	HH21	ARG	358	1.289	37.929	76.190	1.00
	0.00								
	ATOM	1241	HH22	ARG	358	-0.055	37.691	75.122	1.00
	0.00								
55	ATOM	1242	C	ARG	358	3.040	42.803	75.341	1.00
	6.80								
	ATOM	1243	O	ARG	358	2.581	42.352	76.383	1.00
	9.44								

	ATOM	1244	N	ASN	359	3.113	44.120	75.095	1.00
	7.42								
	ATOM	1245	H	ASN	359	3.472	44.423	74.234	1.00
	0.00								
5	ATOM	1246	CA	ASN	359	2.661	45.128	76.047	1.00
	8.33								
	ATOM	1247	CB	ASN	359	1.161	44.997	76.418	1.00
	8.38								
10	ATOM	1248	CG	ASN	359	0.249	45.452	75.301	1.00
	9.65								
	ATOM	1249	OD1	ASN	359	0.661	46.058	74.325	1.00
	12.69								
	ATOM	1250	ND2	ASN	359	-1.031	45.100	75.428	1.00
	12.89								
15	ATOM	1251	HD21	ASN	359	-1.325	44.590	76.209	1.00
	0.00								
	ATOM	1252	HD22	ASN	359	-1.663	45.395	74.733	1.00
	0.00								
20	ATOM	1253	C	ASN	359	3.477	45.300	77.298	1.00
	7.53								
	ATOM	1254	O	ASN	359	2.976	45.618	78.353	1.00
	9.21								
	ATOM	1255	N	TYR	360	4.786	45.023	77.207	1.00
	6.45								
25	ATOM	1256	H	TYR	360	5.185	44.692	76.374	1.00
	0.00								
	ATOM	1257	CA	TYR	360	5.629	45.247	78.357	1.00
	6.51								
30	ATOM	1258	CB	TYR	360	6.540	44.026	78.603	1.00
	6.47								
	ATOM	1259	CG	TYR	360	5.822	42.905	79.323	1.00
	7.71								
	ATOM	1260	CD1	TYR	360	5.025	42.040	78.627	1.00
	11.10								
35	ATOM	1261	CE1	TYR	360	4.362	40.971	79.293	1.00
	12.54								
	ATOM	1262	CD2	TYR	360	5.976	42.726	80.686	1.00
	9.28								
40	ATOM	1263	CE2	TYR	360	5.314	41.706	81.359	1.00
	11.47								
	ATOM	1264	CZ	TYR	360	4.526	40.842	80.651	1.00
	13.14								
	ATOM	1265	OH	TYR	360	3.793	39.868	81.329	1.00
	16.50								
45	ATOM	1266	HH	TYR	360	3.298	39.348	80.701	1.00
	0.00								
	ATOM	1267	C	TYR	360	6.552	46.413	78.061	1.00
	5.30								
50	ATOM	1268	O	TYR	360	6.622	46.880	76.936	1.00
	6.46								
	ATOM	1269	N	ILE	361	7.170	46.882	79.125	1.00
	6.46								
	ATOM	1270	H	ILE	361	6.925	46.527	80.001	1.00
	0.00								
55	ATOM	1271	CA	ILE	361	8.234	47.889	79.038	1.00
	6.30								
	ATOM	1272	CB	ILE	361	7.795	49.281	79.548	1.00
	7.47								

	ATOM 8.36	1273	CG2	ILE	361	6.822	49.866	78.557	1.00
	ATOM 7.63	1274	CG1	ILE	361	7.283	49.192	80.974	1.00
5	ATOM 10.24	1275	CD1	ILE	361	7.029	50.595	81.537	1.00
	ATOM 6.54	1276	C	ILE	361	9.397	47.292	79.854	1.00
10	ATOM 6.53	1277	O	ILE	361	9.207	46.473	80.761	1.00
	ATOM 6.73	1278	N	HIS	362	10.621	47.761	79.567	1.00
	ATOM 0.00	1279	H	HIS	362	10.705	48.454	78.895	1.00
15	ATOM 6.25	1280	CA	HIS	362	11.806	47.232	80.245	1.00
	ATOM 5.77	1281	CB	HIS	362	12.869	46.961	79.178	1.00
20	ATOM 5.45	1282	CG	HIS	362	14.092	46.248	79.690	1.00
	ATOM 6.09	1283	CD2	HIS	362	14.468	44.938	79.647	1.00
	ATOM 6.86	1284	ND1	HIS	362	15.077	46.892	80.397	1.00
25	ATOM 0.00	1285	HD1	HIS	362	15.110	47.858	80.570	1.00
	ATOM 7.28	1286	CE1	HIS	362	16.014	46.030	80.777	1.00
30	ATOM 6.66	1287	NE2	HIS	362	15.650	44.829	80.321	1.00
	ATOM 0.00	1288	HE2	HIS	362	16.165	44.014	80.467	1.00
	ATOM 6.96	1289	C	HIS	362	12.312	48.198	81.333	1.00
35	ATOM 7.16	1290	O	HIS	362	12.604	47.804	82.445	1.00
	ATOM 7.28	1291	N	ARG	363	12.455	49.470	80.951	1.00
40	ATOM 0.00	1292	H	ARG	363	12.263	49.705	80.018	1.00
	ATOM 7.20	1293	CA	ARG	363	12.869	50.559	81.843	1.00
	ATOM 7.60	1294	CB	ARG	363	12.013	50.655	83.133	1.00
45	ATOM 7.72	1295	CG	ARG	363	10.522	50.776	82.802	1.00
	ATOM 9.74	1296	CD	ARG	363	9.783	51.262	84.036	1.00
50	ATOM 10.57	1297	NE	ARG	363	9.869	50.343	85.152	1.00
	ATOM 0.00	1298	HE	ARG	363	10.012	49.404	84.937	1.00
	ATOM 12.41	1299	CZ	ARG	363	9.750	50.683	86.428	1.00
55	ATOM 13.78	1300	NH1	ARG	363	9.556	51.955	86.773	1.00
	ATOM 0.00	1301	HH11	ARG	363	9.518	52.662	86.073	1.00

	ATOM 0.00	1302	HH12	ARG	363	9.488	52.195	87.740	1.00
	ATOM 12.55	1303	NH2	ARG	363	9.784	49.752	87.368	1.00
5	ATOM 0.00	1304	HH21	ARG	363	9.877	48.784	87.114	1.00
	ATOM 0.00	1305	HH22	ARG	363	9.691	50.004	88.328	1.00
10	ATOM 8.08	1306	C	ARG	363	14.314	50.619	82.248	1.00
	ATOM 10.09	1307	O	ARG	363	14.715	51.571	82.927	1.00
	ATOM 7.43	1308	N	ASP	364	15.106	49.633	81.845	1.00
15	ATOM 0.00	1309	H	ASP	364	14.739	48.926	81.296	1.00
	ATOM 7.37	1310	CA	ASP	364	16.538	49.612	82.217	1.00
20	ATOM 9.33	1311	CB	ASP	364	16.718	48.600	83.369	1.00
	ATOM 11.01	1312	CG	ASP	364	17.934	48.885	84.252	1.00
	ATOM 14.23	1313	OD1	ASP	364	18.666	49.855	83.985	1.00
25	ATOM 13.15	1314	OD2	ASP	364	18.133	48.118	85.232	1.00
	ATOM 7.00	1315	C	ASP	364	17.328	49.176	80.979	1.00
30	ATOM 6.90	1316	O	ASP	364	18.325	48.457	81.081	1.00
	ATOM 6.16	1317	N	LEU	365	16.969	49.704	79.816	1.00
	ATOM 0.00	1318	H	LEU	365	16.252	50.366	79.771	1.00
35	ATOM 5.80	1319	CA	LEU	365	17.626	49.321	78.591	1.00
	ATOM 6.34	1320	CB	LEU	365	16.679	49.555	77.398	1.00
40	ATOM 5.69	1321	CG	LEU	365	17.204	49.239	75.995	1.00
	ATOM 7.46	1322	CD1	LEU	365	17.619	47.750	75.912	1.00
	ATOM 7.06	1323	CD2	LEU	365	16.103	49.465	75.001	1.00
45	ATOM 7.96	1324	C	LEU	365	18.919	50.133	78.461	1.00
	ATOM 8.00	1325	O	LEU	365	18.889	51.344	78.362	1.00
50	ATOM 6.41	1326	N	ARG	366	20.036	49.436	78.454	1.00
	ATOM 0.00	1327	H	ARG	366	19.967	48.457	78.536	1.00
	ATOM 6.06	1328	CA	ARG	366	21.379	50.010	78.340	1.00
55	ATOM 6.83	1329	CB	ARG	366	21.798	50.631	79.664	1.00
	ATOM 7.28	1330	CG	ARG	366	21.724	49.671	80.885	1.00

	ATOM 11.03	1331	CD	ARG	366	21.899	50.431	82.169	1.00
	ATOM 13.50	1332	NE	ARG	366	23.175	51.133	82.201	1.00
5	ATOM 0.00	1333	HE	ARG	366	23.818	50.985	81.487	1.00
	ATOM 15.04	1334	CZ	ARG	366	23.495	51.973	83.177	1.00
10	ATOM 18.15	1335	NH1	ARG	366	22.631	52.211	84.154	1.00
	ATOM 0.00	1336	HH11	ARG	366	21.732	51.761	84.155	1.00
	ATOM 0.00	1337	HH12	ARG	366	22.860	52.847	84.888	1.00
15	ATOM 17.55	1338	NH2	ARG	366	24.710	52.474	83.242	1.00
	ATOM 0.00	1339	HH21	ARG	366	25.390	52.220	82.560	1.00
20	ATOM 0.00	1340	HH22	ARG	366	24.954	53.114	83.978	1.00
	ATOM 6.86	1341	C	ARG	366	22.302	48.866	77.977	1.00
	ATOM 5.81	1342	O	ARG	366	21.964	47.715	78.218	1.00
25	ATOM 5.91	1343	N	ALA	367	23.515	49.174	77.533	1.00
	ATOM 0.00	1344	H	ALA	367	23.776	50.100	77.473	1.00
30	ATOM 5.11	1345	CA	ALA	367	24.423	48.087	77.137	1.00
	ATOM 6.19	1346	CB	ALA	367	25.693	48.656	76.461	1.00
	ATOM 6.35	1347	C	ALA	367	24.811	47.137	78.280	1.00
35	ATOM 6.18	1348	O	ALA	367	25.139	45.947	77.977	1.00
	ATOM 6.36	1349	N	ALA	368	24.795	47.612	79.518	1.00
40	ATOM 0.00	1350	H	ALA	368	24.592	48.543	79.680	1.00
	ATOM 6.76	1351	CA	ALA	368	25.095	46.734	80.647	1.00
	ATOM 8.33	1352	CB	ALA	368	25.129	47.490	81.939	1.00
45	ATOM 6.98	1353	C	ALA	368	24.060	45.615	80.760	1.00
	ATOM 8.43	1354	O	ALA	368	24.355	44.580	81.356	1.00
50	ATOM 5.80	1355	N	ASN	369	22.879	45.839	80.193	1.00
	ATOM 0.00	1356	H	ASN	369	22.723	46.674	79.700	1.00
	ATOM 6.07	1357	CA	ASN	369	21.773	44.877	80.321	1.00
55	ATOM 6.03	1358	CB	ASN	369	20.528	45.545	80.911	1.00
	ATOM 7.00	1359	CG	ASN	369	20.736	45.949	82.373	1.00

	ATOM 8.89	1360	OD1	ASN	369	21.510	45.292	83.117	1.00
	ATOM 8.55	1361	ND2	ASN	369	20.100	47.037	82.798	1.00
5	ATOM 0.00	1362	HD21	ASN	369	19.516	47.524	82.189	1.00
	ATOM 0.00	1363	HD22	ASN	369	20.220	47.286	83.732	1.00
10	ATOM 6.64	1364	C	ASN	369	21.465	44.127	79.063	1.00
	ATOM 6.61	1365	O	ASN	369	20.369	43.601	78.878	1.00
	ATOM 4.83	1366	N	ILE	370	22.437	44.098	78.181	1.00
15	ATOM 0.00	1367	H	ILE	370	23.235	44.632	78.335	1.00
	ATOM 4.37	1368	CA	ILE	370	22.369	43.243	76.985	1.00
20	ATOM 4.38	1369	CB	ILE	370	22.705	44.012	75.724	1.00
	ATOM 5.49	1370	CG2	ILE	370	22.787	43.118	74.492	1.00
	ATOM 4.73	1371	CG1	ILE	370	21.745	45.198	75.560	1.00
25	ATOM 6.97	1372	CD1	ILE	370	20.210	44.713	75.543	1.00
	ATOM 5.68	1373	C	ILE	370	23.478	42.202	77.193	1.00
30	ATOM 6.20	1374	O	ILE	370	24.572	42.529	77.592	1.00
	ATOM 4.58	1375	N	LEU	371	23.127	40.935	77.039	1.00
	ATOM 0.00	1376	H	LEU	371	22.204	40.693	76.821	1.00
35	ATOM 4.32	1377	CA	LEU	371	24.146	39.864	77.181	1.00
	ATOM 3.54	1378	CB	LEU	371	23.603	38.761	78.096	1.00
40	ATOM 4.30	1379	CG	LEU	371	23.482	39.116	79.561	1.00
	ATOM 6.65	1380	CD1	LEU	371	22.880	38.001	80.367	1.00
	ATOM 7.93	1381	CD2	LEU	371	24.898	39.456	80.168	1.00
45	ATOM 4.99	1382	C	LEU	371	24.527	39.331	75.804	1.00
	ATOM 5.49	1383	O	LEU	371	23.742	39.345	74.833	1.00
50	ATOM 4.04	1384	N	VAL	372	25.789	38.862	75.674	1.00
	ATOM 0.00	1385	H	VAL	372	26.390	38.858	76.440	1.00
	ATOM 4.69	1386	CA	VAL	372	26.310	38.403	74.401	1.00
55	ATOM 5.67	1387	CB	VAL	372	27.623	39.164	74.085	1.00
	ATOM 6.43	1388	CG1	VAL	372	28.146	38.812	72.722	1.00



	ATOM 6.52	1389	CG2	VAL	372	27.347	40.736	74.166	1.00
	ATOM 4.28	1390	C	VAL	372	26.665	36.905	74.473	1.00
5	ATOM 5.15	1391	O	VAL	372	27.315	36.495	75.428	1.00
	ATOM 4.34	1392	N	SER	373	26.214	36.144	73.480	1.00
10	ATOM 0.00	1393	H	SER	373	25.728	36.553	72.741	1.00
	ATOM 4.40	1394	CA	SER	373	26.464	34.684	73.459	1.00
	ATOM 3.61	1395	CB	SER	373	25.410	33.992	72.594	1.00
15	ATOM 5.61	1396	OG	SER	373	25.671	34.220	71.244	1.00
	ATOM 0.00	1397	HG	SER	373	26.531	33.882	71.018	1.00
20	ATOM 6.57	1398	C	SER	373	27.827	34.351	72.900	1.00
	ATOM 5.65	1399	O	SER	373	28.541	35.199	72.374	1.00
	ATOM 7.67	1400	N	ASP	374	28.158	33.063	72.982	1.00
25	ATOM 0.00	1401	H	ASP	374	27.582	32.419	73.420	1.00
	ATOM 9.72	1402	CA	ASP	374	29.401	32.633	72.405	1.00
30	ATOM 12.24	1403	CB	ASP	374	29.630	31.168	72.747	1.00
	ATOM 16.64	1404	CG	ASP	374	28.651	30.288	72.094	1.00
	ATOM 18.67	1405	OD1	ASP	374	27.446	30.542	72.290	1.00
35	ATOM 20.28	1406	OD2	ASP	374	29.066	29.426	71.278	1.00
	ATOM 9.29	1407	C	ASP	374	29.476	32.827	70.891	1.00
40	ATOM 11.15	1408	O	ASP	374	30.554	32.831	70.344	1.00
	ATOM 8.21	1409	N	THR	375	28.327	32.927	70.190	1.00
	ATOM 0.00	1410	H	THR	375	27.459	32.875	70.657	1.00
45	ATOM 8.40	1411	CA	THR	375	28.306	33.120	68.755	1.00
	ATOM 8.35	1412	CB	THR	375	27.238	32.260	68.056	1.00
50	ATOM 9.12	1413	OG1	THR	375	25.982	32.561	68.672	1.00
	ATOM 0.00	1414	HG1	THR	375	25.806	33.510	68.563	1.00
	ATOM 11.28	1415	CG2	THR	375	27.485	30.719	68.176	1.00
55	ATOM 8.49	1416	C	THR	375	28.106	34.578	68.355	1.00
	ATOM 8.72	1417	O	THR	375	27.811	34.903	67.226	1.00

	ATOM 7.19	1418	N	LEU	376	28.203	35.436	69.353	1.00
	ATOM 0.00	1419	H	LEU	376	28.346	35.101	70.256	1.00
5	ATOM 8.14	1420	CA	LEU	376	28.118	36.883	69.173	1.00
	ATOM 10.40	1421	CB	LEU	376	29.149	37.407	68.161	1.00
10	ATOM 11.93	1422	CG	LEU	376	30.608	37.097	68.564	1.00
	ATOM 13.62	1423	CD1	LEU	376	31.457	38.031	67.671	1.00
	ATOM 13.34	1424	CD2	LEU	376	30.949	37.256	70.019	1.00
15	ATOM 8.14	1425	C	LEU	376	26.710	37.342	68.841	1.00
	ATOM 8.33	1426	O	LEU	376	26.502	38.204	67.976	1.00
20	ATOM 6.49	1427	N	SER	377	25.742	36.609	69.371	1.00
	ATOM 0.00	1428	H	SER	377	25.946	35.806	69.878	1.00
	ATOM 6.46	1429	CA	SER	377	24.356	37.087	69.250	1.00
25	ATOM 5.34	1430	CB	SER	377	23.400	35.934	68.923	1.00
	ATOM 6.98	1431	OG	SER	377	23.368	34.975	69.963	1.00
30	ATOM 0.00	1432	HG	SER	377	22.769	34.262	69.738	1.00
	ATOM 5.46	1433	C	SER	377	24.012	37.791	70.588	1.00
	ATOM 6.09	1434	O	SER	377	24.592	37.566	71.649	1.00
35	ATOM 5.11	1435	N	CYS	378	23.032	38.684	70.544	1.00
	ATOM 0.00	1436	H	CYS	378	22.529	38.848	69.724	1.00
40	ATOM 6.25	1437	CA	CYS	378	22.730	39.470	71.742	1.00
	ATOM 6.45	1438	CB	CYS	378	22.741	40.969	71.406	1.00
	ATOM 10.06	1439	SG	CYS	378	24.415	41.584	70.930	1.00
45	ATOM 5.48	1440	C	CYS	378	21.323	39.216	72.223	1.00
	ATOM 5.39	1441	O	CYS	378	20.443	38.963	71.396	1.00
50	ATOM 4.43	1442	N	LYS	379	21.131	39.294	73.532	1.00
	ATOM 0.00	1443	H	LYS	379	21.897	39.485	74.116	1.00
	ATOM 4.63	1444	CA	LYS	379	19.808	39.073	74.131	1.00
55	ATOM 4.64	1445	CB	LYS	379	19.695	37.664	74.777	1.00
	ATOM 4.87	1446	CG	LYS	379	19.810	36.618	73.678	1.00

	ATOM 3.55	1447	CD	LYS	379	19.503	35.253	74.181	1.00
	ATOM 4.66	1448	CE	LYS	379	19.881	34.280	73.053	1.00
5	ATOM 6.09	1449	NZ	LYS	379	19.074	32.964	73.127	1.00
	ATOM 0.00	1450	HZ1	LYS	379	18.062	33.166	73.034	1.00
10	ATOM 0.00	1451	HZ2	LYS	379	19.248	32.493	74.028	1.00
	ATOM 0.00	1452	HZ3	LYS	379	19.372	32.341	72.353	1.00
	ATOM 4.75	1453	C	LYS	379	19.553	40.113	75.210	1.00
15	ATOM 5.82	1454	O	LYS	379	20.444	40.544	75.950	1.00
	ATOM 3.76	1455	N	ILE	380	18.281	40.504	75.338	1.00
20	ATOM 0.00	1456	H	ILE	380	17.617	40.153	74.718	1.00
	ATOM 3.92	1457	CA	ILE	380	17.902	41.447	76.392	1.00
	ATOM 5.30	1458	CB	ILE	380	16.439	41.933	76.175	1.00
25	ATOM 5.03	1459	CG2	ILE	380	16.075	42.984	77.249	1.00
	ATOM 8.04	1460	CG1	ILE	380	16.168	42.431	74.744	1.00
30	ATOM 9.70	1461	CD1	ILE	380	16.997	43.587	74.311	1.00
	ATOM 4.94	1462	C	ILE	380	17.922	40.709	77.742	1.00
	ATOM 4.49	1463	O	ILE	380	17.397	39.599	77.876	1.00
35	ATOM 5.27	1464	N	ALA	381	18.455	41.367	78.752	1.00
	ATOM 0.00	1465	H	ALA	381	18.807	42.267	78.607	1.00
40	ATOM 5.60	1466	CA	ALA	381	18.528	40.803	80.077	1.00
	ATOM 6.73	1467	CB	ALA	381	20.023	40.357	80.356	1.00
	ATOM 7.05	1468	C	ALA	381	18.070	41.818	81.146	1.00
45	ATOM 6.78	1469	O	ALA	381	17.737	42.961	80.815	1.00
	ATOM 7.75	1470	N	ASP	382	18.087	41.372	82.394	1.00
50	ATOM 0.00	1471	H	ASP	382	18.342	40.442	82.530	1.00
	ATOM 8.33	1472	CA	ASP	382	17.763	42.160	83.573	1.00
	ATOM 10.89	1473	CB	ASP	382	18.797	43.262	83.852	1.00
55	ATOM 14.13	1474	CG	ASP	382	18.620	43.868	85.256	1.00
	ATOM 17.05	1475	OD1	ASP	382	17.585	43.590	85.944	1.00

	ATOM 17.44	1476	OD2	ASP	382	19.563	44.563	85.725	1.00
	ATOM 8.68	1477	C	ASP	382	16.365	42.738	83.523	1.00
5	ATOM 9.78	1478	O	ASP	382	16.140	43.927	83.251	1.00
	ATOM 7.70	1479	N	PHE	383	15.419	41.900	83.924	1.00
10	ATOM 0.00	1480	H	PHE	383	15.675	41.030	84.282	1.00
	ATOM 8.11	1481	CA	PHE	383	14.015	42.275	83.884	1.00
	ATOM 7.97	1482	CB	PHE	383	13.235	41.053	83.392	1.00
15	ATOM 7.04	1483	CG	PHE	383	13.575	40.669	81.982	1.00
	ATOM 6.87	1484	CD1	PHE	383	13.019	41.341	80.899	1.00
20	ATOM 5.96	1485	CD2	PHE	383	14.543	39.678	81.727	1.00
	ATOM 5.83	1486	CE1	PHE	383	13.419	41.040	79.600	1.00
	ATOM 6.87	1487	CE2	PHE	383	14.933	39.388	80.430	1.00
25	ATOM 6.24	1488	CZ	PHE	383	14.397	40.045	79.374	1.00
	ATOM 8.69	1489	C	PHE	383	13.457	42.771	85.216	1.00
30	ATOM 9.48	1490	O	PHE	383	12.227	42.854	85.411	1.00
	ATOM 9.32	1491	N	GLY	384	14.344	43.214	86.096	1.00
	ATOM 0.00	1492	H	GLY	384	15.292	43.213	85.846	1.00
35	ATOM 10.41	1493	CA	GLY	384	13.932	43.659	87.416	1.00
	ATOM 10.19	1494	C	GLY	384	12.963	44.838	87.414	1.00
40	ATOM 11.74	1495	O	GLY	384	12.117	44.945	88.313	1.00
	ATOM 9.00	1496	N	LEU	385	13.146	45.758	86.469	1.00
	ATOM 0.00	1497	H	LEU	385	13.886	45.663	85.830	1.00
45	ATOM 9.26	1498	CA	LEU	385	12.259	46.925	86.389	1.00
	ATOM 9.63	1499	CB	LEU	385	13.066	48.198	86.104	1.00
50	ATOM 12.22	1500	CG	LEU	385	13.971	48.641	87.249	1.00
	ATOM 12.81	1501	CD1	LEU	385	14.819	49.840	86.744	1.00
	ATOM 13.55	1502	CD2	LEU	385	13.169	48.985	88.509	1.00
55	ATOM 8.64	1503	C	LEU	385	11.197	46.759	85.349	1.00
	ATOM 8.68	1504	O	LEU	385	10.364	47.645	85.173	1.00

	ATOM 7.47	1505	N	ALA	386	11.185	45.634	84.630	1.00
	ATOM 0.00	1506	H	ALA	386	11.848	44.929	84.838	1.00
5	ATOM 7.81	1507	CA	ALA	386	10.194	45.436	83.547	1.00
	ATOM 8.06	1508	CB	ALA	386	10.579	44.228	82.723	1.00
10	ATOM 8.67	1509	C	ALA	386	8.783	45.304	84.065	1.00
	ATOM 9.09	1510	O	ALA	386	8.597	44.840	85.166	1.00
	ATOM 9.55	1511	N	ARG	387	7.810	45.773	83.293	1.00
15	ATOM 0.00	1512	H	ARG	387	8.034	46.133	82.404	1.00
	ATOM 10.38	1513	CA	ARG	387	6.411	45.761	83.739	1.00
20	ATOM 9.95	1514	CB	ARG	387	6.041	47.127	84.382	1.00
	ATOM 11.72	1515	CG	ARG	387	6.877	47.550	85.627	1.00
	ATOM 11.98	1516	CD	ARG	387	6.626	46.683	86.843	1.00
25	ATOM 14.30	1517	NE	ARG	387	7.333	47.168	88.009	1.00
	ATOM 0.00	1518	HE	ARG	387	6.881	47.843	88.543	1.00
30	ATOM 14.48	1519	CZ	ARG	387	8.535	46.731	88.390	1.00
	ATOM 14.82	1520	NH1	ARG	387	9.165	45.782	87.704	1.00
	ATOM 0.00	1521	HH11	ARG	387	8.741	45.377	86.898	1.00
35	ATOM 0.00	1522	HH12	ARG	387	10.064	45.463	88.010	1.00
	ATOM 16.13	1523	NH2	ARG	387	9.116	47.251	89.453	1.00
40	ATOM 0.00	1524	HH21	ARG	387	8.645	47.969	89.975	1.00
	ATOM 0.00	1525	HH22	ARG	387	10.012	46.930	89.752	1.00
	ATOM 10.77	1526	C	ARG	387	5.445	45.555	82.610	1.00
45	ATOM 9.38	1527	O	ARG	387	5.695	45.985	81.481	1.00
	ATOM 12.31	1528	N	LEU	388	4.321	44.886	82.942	1.00
50	ATOM 0.00	1529	H	LEU	388	4.214	44.547	83.854	1.00
	ATOM 15.61	1530	CA	LEU	388	3.233	44.681	82.000	1.00
	ATOM 16.22	1531	CB	LEU	388	2.312	43.523	82.428	1.00
55	ATOM 16.99	1532	CG	LEU	388	1.164	43.180	81.444	1.00
	ATOM 17.93	1533	CD1	LEU	388	1.624	43.029	80.043	1.00

	ATOM	1534	CD2	LEU	388	0.454	41.881	81.908	1.00
	19.04								
	ATOM	1535	C	LEU	388	2.444	45.977	82.079	1.00
	17.76								
5	ATOM	1536	O	LEU	388	2.023	46.406	83.162	1.00
	18.30								
	ATOM	1537	N	ILE	389	2.211	46.542	80.910	1.00
	19.03								
10	ATOM	1538	H	ILE	389	2.498	46.080	80.106	1.00
	0.00								
	ATOM	1539	CA	ILE	389	1.544	47.815	80.736	1.00
	22.41								
	ATOM	1540	CB	ILE	389	2.540	48.673	79.801	1.00
	22.90								
15	ATOM	1541	CG2	ILE	389	1.877	49.282	78.614	1.00
	25.50								
	ATOM	1542	CG1	ILE	389	3.364	49.629	80.675	1.00
	24.32								
20	ATOM	1543	CD1	ILE	389	3.584	49.158	82.104	1.00
	22.03								
	ATOM	1544	C	ILE	389	0.062	47.558	80.316	1.00
	23.87								
	ATOM	1545	O	ILE	389	-0.245	47.095	79.233	1.00
	24.93								
25	ATOM	1546	N	GLU	390	-0.831	47.762	81.277	1.00
	26.28								
	ATOM	1547	H	GLU	390	-0.512	48.078	82.143	1.00
	0.00								
30	ATOM	1548	CA	GLU	390	-2.289	47.561	81.120	1.00
	27.19								
	ATOM	1549	CB	GLU	390	-2.852	47.412	82.550	1.00
	28.06								
	ATOM	1550	CG	GLU	390	-1.738	46.634	83.317	1.00
	29.36								
35	ATOM	1551	CD	GLU	390	-2.098	45.949	84.591	1.00
	29.77								
	ATOM	1552	OE1	GLU	390	-2.656	44.821	84.536	1.00
	33.71								
40	ATOM	1553	OE2	GLU	390	-1.721	46.483	85.657	1.00
	32.83								
	ATOM	1554	C	GLU	390	-2.889	48.676	80.239	1.00
	27.94								
	ATOM	1555	O	GLU	390	-3.554	48.404	79.235	1.00
	28.70								
45	ATOM	1556	N	ASP	391	-2.544	49.914	80.562	1.00
	27.89								
	ATOM	1557	H	ASP	391	-2.136	49.831	81.347	1.00
	0.00								
50	ATOM	1558	CA	ASP	391	-2.912	51.113	79.835	1.00
	27.88								
	ATOM	1559	CB	ASP	391	-3.614	52.091	80.788	1.00
	28.06								
	ATOM	1560	CG	ASP	391	-4.958	51.566	81.269	1.00
	28.78								
55	ATOM	1561	OD1	ASP	391	-5.926	51.686	80.489	1.00
	31.01								
	ATOM	1562	OD2	ASP	391	-5.055	51.010	82.382	1.00
	30.51								

	ATOM	1563	C	ASP	391	-1.566	51.661	79.319	1.00
	28.40								
	ATOM	1564	O	ASP	391	-0.498	51.332	79.861	1.00
	30.70								
5	ATOM	1565	N	ASN	392	-1.584	52.451	78.264	1.00
	27.86								
	ATOM	1566	H	ASN	392	-2.449	52.738	77.912	1.00
	0.00								
10	ATOM	1567	CA	ASN	392	-0.347	52.988	77.662	1.00
	26.67								
	ATOM	1568	CB	ASN	392	-0.749	54.151	76.702	1.00
	27.44								
	ATOM	1569	CG	ASN	392	0.422	54.981	76.169	1.00
	27.68								
15	ATOM	1570	OD1	ASN	392	0.624	55.099	74.941	1.00
	30.22								
	ATOM	1571	ND2	ASN	392	1.103	55.672	77.069	1.00
	29.28								
20	ATOM	1572	HD21	ASN	392	0.826	55.624	78.013	1.00
	0.00								
	ATOM	1573	HD22	ASN	392	1.842	56.233	76.770	1.00
	0.00								
	ATOM	1574	C	ASN	392	0.852	53.313	78.597	1.00
	26.04								
25	ATOM	1575	O	ASN	392	2.002	52.961	78.245	1.00
	26.05								
	ATOM	1576	N	GLU	393	0.580	53.698	79.851	1.00
	24.55								
30	ATOM	1577	H	GLU	393	-0.346	53.711	80.181	1.00
	0.00								
	ATOM	1578	CA	GLU	393	1.659	54.131	80.765	1.00
	24.24								
	ATOM	1579	CB	GLU	393	1.533	55.661	80.775	1.00
	24.48								
35	ATOM	1580	CG	GLU	393	2.497	56.482	81.537	1.00
	26.69								
	ATOM	1581	CD	GLU	393	2.033	57.925	81.500	1.00
	27.72								
40	ATOM	1582	OE1	GLU	393	1.319	58.351	82.440	1.00
	29.14								
	ATOM	1583	OE2	GLU	393	2.348	58.613	80.499	1.00
	30.45								
	ATOM	1584	C	GLU	393	1.838	53.569	82.213	1.00
	23.01								
45	ATOM	1585	O	GLU	393	0.853	53.231	82.901	1.00
	24.00								
	ATOM	1586	N	PTR	394	3.101	53.425	82.647	1.00
	20.84								
50	ATOM	1587	CA	PTR	394	3.441	52.971	83.994	1.00
	19.86								
	ATOM	1588	C	PTR	394	3.985	54.192	84.730	1.00
	19.41								
	ATOM	1589	O	PTR	394	4.883	54.882	84.246	1.00
	18.42								
55	ATOM	1590	CB	PTR	394	4.521	51.850	83.989	1.00
	19.64								
	ATOM	1591	CG	PTR	394	4.825	51.286	85.369	1.00
	21.18								

	ATOM	1592	CD1	PTR	394	3.984	50.327	85.920	1.00
	22.60								
	ATOM	1593	CD2	PTR	394	5.940	51.714	86.104	1.00
	22.12								
5	ATOM	1594	CE1	PTR	394	4.263	49.820	87.180	1.00
	25.56								
	ATOM	1595	CE2	PTR	394	6.242	51.222	87.371	1.00
	25.23								
10	ATOM	1596	CZ	PTR	394	5.372	50.268	87.881	1.00
	27.46								
	ATOM	1597	OH	PTR	394	5.671	49.754	89.196	1.00
	32.26								
	ATOM	1598	P	PTR	394	6.483	50.612	90.322	1.00
	35.99								
15	ATOM	1599	O1P	PTR	394	7.817	50.767	89.802	1.00
	35.74								
	ATOM	1600	O2P	PTR	394	6.596	49.898	91.619	1.00
	35.31								
20	ATOM	1601	O3P	PTR	394	5.885	52.009	90.479	1.00
	36.41								
	ATOM	1602	N	THR	395	3.451	54.460	85.904	1.00
	20.04								
	ATOM	1603	H	THR	395	2.745	53.891	86.266	1.00
	0.00								
25	ATOM	1604	CA	THR	395	3.920	55.583	86.693	1.00
	20.75								
	ATOM	1605	CB	THR	395	2.722	56.526	87.037	1.00
	20.90								
30	ATOM	1606	OG1	THR	395	2.160	57.062	85.828	1.00
	21.39								
	ATOM	1607	HG1	THR	395	1.897	56.368	85.193	1.00
	0.00								
	ATOM	1608	CG2	THR	395	3.200	57.691	87.864	1.00
	22.70								
35	ATOM	1609	C	THR	395	4.652	55.047	87.929	1.00
	21.38								
	ATOM	1610	O	THR	395	4.100	54.294	88.718	1.00
	22.13								
40	ATOM	1611	N	ALA	396	5.943	55.339	88.035	1.00
	21.97								
	ATOM	1612	H	ALA	396	6.350	55.856	87.315	1.00
	0.00								
	ATOM	1613	CA	ALA	396	6.773	54.881	89.148	1.00
	23.48								
45	ATOM	1614	CB	ALA	396	8.240	55.170	88.811	1.00
	22.84								
	ATOM	1615	C	ALA	396	6.403	55.520	90.512	1.00
	24.59								
50	ATOM	1616	O	ALA	396	5.348	56.123	90.650	1.00
	25.45								
	ATOM	1617	N	ALA	397	7.319	55.433	91.486	1.00
	26.07								
	ATOM	1618	H	ALA	397	8.126	54.926	91.281	1.00
	0.00								
55	ATOM	1619	CA	ALA	397	7.172	55.993	92.851	1.00
	27.25								
	ATOM	1620	CB	ALA	397	7.836	55.050	93.836	1.00
	27.32								



	ATOM 28.09	1621	C	ALA	397	7.857	57.388	92.889	1.00
	ATOM 28.75	1622	O	ALA	397	8.990	57.494	92.435	1.00
5	ATOM 28.89	1623	N	GLU	398	7.210	58.451	93.407	1.00
	ATOM 0.00	1624	H	GLU	398	6.305	58.325	93.812	1.00
10	ATOM 29.61	1625	CA	GLU	398	7.837	59.794	93.419	1.00
	ATOM 29.76	1626	CB	GLU	398	7.099	60.823	94.308	1.00
	ATOM 31.04	1627	CG	GLU	398	5.801	61.413	93.737	1.00
15	ATOM 31.85	1628	CD	GLU	398	5.826	61.593	92.232	1.00
	ATOM 32.63	1629	OE1	GLU	398	6.686	62.342	91.720	1.00
20	ATOM 33.67	1630	OE2	GLU	398	4.983	60.957	91.549	1.00
	ATOM 29.08	1631	C	GLU	398	9.311	59.770	93.822	1.00
	ATOM 30.57	1632	O	GLU	398	10.149	60.476	93.225	1.00
25	ATOM 29.05	1633	N	GLY	399	9.626	58.912	94.793	1.00
	ATOM 0.00	1634	H	GLY	399	8.914	58.386	95.191	1.00
30	ATOM 27.68	1635	CA	GLY	399	10.993	58.770	95.265	1.00
	ATOM 27.05	1636	C	GLY	399	11.902	57.917	94.392	1.00
	ATOM 28.08	1637	O	GLY	399	13.124	58.061	94.489	1.00
35	ATOM 25.80	1638	N	ALA	400	11.343	57.016	93.575	1.00
	ATOM 0.00	1639	H	ALA	400	10.365	56.937	93.574	1.00
40	ATOM 24.97	1640	CA	ALA	400	12.147	56.140	92.690	1.00
	ATOM 25.88	1641	CB	ALA	400	11.230	55.264	91.820	1.00
	ATOM 24.08	1642	C	ALA	400	13.072	56.964	91.796	1.00
45	ATOM 23.69	1643	O	ALA	400	12.653	57.972	91.231	1.00
	ATOM 22.58	1644	N	ALA	401	14.325	56.527	91.684	1.00
50	ATOM 0.00	1645	H	ALA	401	14.587	55.709	92.161	1.00
	ATOM 21.72	1646	CA	ALA	401	15.321	57.231	90.873	1.00
	ATOM 21.84	1647	CB	ALA	401	16.440	57.756	91.750	1.00
55	ATOM 21.42	1648	C	ALA	401	15.898	56.360	89.770	1.00
	ATOM 22.02	1649	O	ALA	401	16.135	55.160	89.962	1.00

	ATOM 20.04	1650	N	PHE	402	16.136	56.968	88.606	1.00
	ATOM 0.00	1651	H	PHE	402	15.926	57.920	88.525	1.00
5	ATOM 19.01	1652	CA	PHE	402	16.670	56.251	87.433	1.00
	ATOM 19.03	1653	CB	PHE	402	15.592	56.187	86.349	1.00
10	ATOM 19.84	1654	CG	PHE	402	14.408	55.380	86.765	1.00
	ATOM 20.91	1655	CD1	PHE	402	13.389	55.961	87.520	1.00
	ATOM 21.47	1656	CD2	PHE	402	14.343	54.026	86.462	1.00
15	ATOM 20.57	1657	CE1	PHE	402	12.293	55.170	87.982	1.00
	ATOM 23.31	1658	CE2	PHE	402	13.290	53.251	86.902	1.00
20	ATOM 21.28	1659	CZ	PHE	402	12.265	53.819	87.662	1.00
	ATOM 17.86	1660	C	PHE	402	17.907	56.942	86.893	1.00
	ATOM 18.44	1661	O	PHE	402	18.087	58.127	87.156	1.00
25	ATOM 17.44	1662	N	PRO	403	18.787	56.220	86.178	1.00
	ATOM 18.18	1663	CD	PRO	403	18.730	54.779	85.882	1.00
30	ATOM 16.59	1664	CA	PRO	403	20.019	56.811	85.615	1.00
	ATOM 17.23	1665	CB	PRO	403	20.691	55.637	84.911	1.00
	ATOM 18.61	1666	CG	PRO	403	20.170	54.442	85.679	1.00
35	ATOM 14.73	1667	C	PRO	403	19.624	57.866	84.616	1.00
	ATOM 15.04	1668	O	PRO	403	18.987	57.605	83.596	1.00
40	ATOM 13.61	1669	N	ILE	404	20.022	59.080	84.919	1.00
	ATOM 0.00	1670	H	ILE	404	20.555	59.235	85.731	1.00
	ATOM 12.30	1671	CA	ILE	404	19.660	60.194	84.091	1.00
45	ATOM 13.05	1672	CB	ILE	404	20.203	61.528	84.721	1.00
	ATOM 13.72	1673	CG2	ILE	404	20.079	62.721	83.745	1.00
50	ATOM 14.98	1674	CG1	ILE	404	19.491	61.796	86.058	1.00
	ATOM 17.98	1675	CD1	ILE	404	18.033	61.960	85.911	1.00
	ATOM 11.12	1676	C	ILE	404	20.085	60.106	82.647	1.00
55	ATOM 11.56	1677	O	ILE	404	19.278	60.367	81.756	1.00
	ATOM 9.07	1678	N	LYS	405	21.318	59.670	82.381	1.00

	ATOM	1679	H	LYS	405	21.925	59.426	83.106	1.00
	0.00								
	ATOM	1680	CA	LYS	405	21.775	59.650	81.002	1.00
	7.63								
5	ATOM	1681	CB	LYS	405	23.300	59.453	80.911	1.00
	8.28								
	ATOM	1682	CG	LYS	405	24.061	60.612	81.557	1.00
	8.49								
10	ATOM	1683	CD	LYS	405	25.564	60.423	81.441	1.00
	11.13								
	ATOM	1684	CE	LYS	405	26.337	61.718	81.836	1.00
	13.18								
	ATOM	1685	NZ	LYS	405	27.805	61.777	81.368	1.00
	14.95								
15	ATOM	1686	HZ1	LYS	405	27.839	61.749	80.330	1.00
	0.00								
	ATOM	1687	HZ2	LYS	405	28.334	60.981	81.766	1.00
	0.00								
20	ATOM	1688	HZ3	LYS	405	28.226	62.667	81.697	1.00
	0.00								
	ATOM	1689	C	LYS	405	21.052	58.679	80.061	1.00
	6.24								
	ATOM	1690	O	LYS	405	21.100	58.871	78.838	1.00
	7.40								
25	ATOM	1691	N	TRP	406	20.392	57.651	80.619	1.00
	7.34								
	ATOM	1692	H	TRP	406	20.372	57.535	81.590	1.00
	0.00								
30	ATOM	1693	CA	TRP	406	19.728	56.699	79.731	1.00
	8.49								
	ATOM	1694	CB	TRP	406	20.042	55.244	80.160	1.00
	9.71								
	ATOM	1695	CG	TRP	406	21.321	54.748	79.711	1.00
	10.18								
35	ATOM	1696	CD2	TRP	406	22.566	54.922	80.368	1.00
	10.17								
	ATOM	1697	CE2	TRP	406	23.535	54.241	79.595	1.00
	9.32								
40	ATOM	1698	CE3	TRP	406	22.971	55.598	81.535	1.00
	10.29								
	ATOM	1699	CD1	TRP	406	21.558	54.016	78.589	1.00
	10.80								
	ATOM	1700	NE1	TRP	406	22.902	53.695	78.517	1.00
	10.93								
45	ATOM	1701	HE1	TRP	406	23.320	53.164	77.823	1.00
	0.00								
	ATOM	1702	CZ2	TRP	406	24.874	54.205	79.959	1.00
	11.02								
	ATOM	1703	CZ3	TRP	406	24.319	55.569	81.898	1.00
50	11.88								
	ATOM	1704	CH2	TRP	406	25.251	54.877	81.105	1.00
	9.69								
	ATOM	1705	C	TRP	406	18.212	56.820	79.719	1.00
	9.42								
55	ATOM	1706	O	TRP	406	17.516	56.222	78.871	1.00
	10.08								
	ATOM	1707	N	THR	407	17.706	57.613	80.652	1.00
	9.02								

	ATOM 0.00	1708	H	THR	407	18.294	58.157	81.200	1.00
	ATOM 10.08	1709	CA	THR	407	16.266	57.673	80.873	1.00
5	ATOM 10.72	1710	CB	THR	407	15.984	57.741	82.376	1.00
	ATOM 12.59	1711	OG1	THR	407	16.657	56.670	83.062	1.00
10	ATOM 0.00	1712	HG1	THR	407	16.372	55.818	82.760	1.00
	ATOM 11.37	1713	CG2	THR	407	14.467	57.617	82.608	1.00
	ATOM 9.61	1714	C	THR	407	15.592	58.819	80.107	1.00
15	ATOM 10.13	1715	O	THR	407	16.076	59.955	80.078	1.00
	ATOM 9.86	1716	N	ALA	408	14.445	58.539	79.500	1.00
20	ATOM 0.00	1717	H	ALA	408	14.056	57.662	79.573	1.00
	ATOM 9.33	1718	CA	ALA	408	13.718	59.566	78.744	1.00
	ATOM 10.37	1719	CB	ALA	408	12.465	58.939	78.127	1.00
25	ATOM 10.07	1720	C	ALA	408	13.292	60.704	79.640	1.00
	ATOM 9.61	1721	O	ALA	408	12.984	60.480	80.805	1.00
30	ATOM 10.63	1722	N	PRO	409	13.198	61.913	79.077	1.00
	ATOM 11.82	1723	CD	PRO	409	13.575	62.330	77.706	1.00
	ATOM 12.32	1724	CA	PRO	409	12.791	63.079	79.881	1.00
35	ATOM 12.27	1725	CB	PRO	409	12.689	64.185	78.837	1.00
	ATOM 13.12	1726	CG	PRO	409	13.791	63.853	77.886	1.00
40	ATOM 11.72	1727	C	PRO	409	11.497	62.906	80.643	1.00
	ATOM 12.12	1728	O	PRO	409	11.425	63.271	81.807	1.00
	ATOM 11.64	1729	N	GLU	410	10.460	62.394	79.989	1.00
45	ATOM 0.00	1730	H	GLU	410	10.569	62.124	79.053	1.00
	ATOM 12.82	1731	CA	GLU	410	9.169	62.201	80.675	1.00
50	ATOM 13.13	1732	CB	GLU	410	8.100	61.709	79.705	1.00
	ATOM 14.50	1733	CG	GLU	410	8.302	60.285	79.208	1.00
	ATOM 14.16	1734	CD	GLU	410	9.158	60.157	77.949	1.00
55	ATOM 13.49	1735	OE1	GLU	410	9.883	61.116	77.527	1.00
	ATOM 12.30	1736	OE2	GLU	410	9.065	59.066	77.349	1.00

	ATOM	1737	C	GLU	410	9.271	61.294	81.893	1.00
	13.03								
	ATOM	1738	O	GLU	410	8.546	61.457	82.882	1.00
	12.80								
5	ATOM	1739	N	ALA	411	10.166	60.309	81.848	1.00
	12.07								
	ATOM	1740	H	ALA	411	10.709	60.180	81.049	1.00
	0.00								
10	ATOM	1741	CA	ALA	411	10.349	59.452	82.995	1.00
	13.48								
	ATOM	1742	CB	ALA	411	11.013	58.115	82.544	1.00
	11.89								
	ATOM	1743	C	ALA	411	11.148	60.152	84.098	1.00
	13.86								
15	ATOM	1744	O	ALA	411	10.810	60.060	85.261	1.00
	14.48								
	ATOM	1745	N	ILE	412	12.181	60.902	83.730	1.00
	14.47								
20	ATOM	1746	H	ILE	412	12.449	60.948	82.784	1.00
	0.00								
	ATOM	1747	CA	ILE	412	12.948	61.654	84.744	1.00
	14.35								
	ATOM	1748	CB	ILE	412	14.113	62.409	84.064	1.00
	14.57								
25	ATOM	1749	CG2	ILE	412	14.727	63.480	85.056	1.00
	13.67								
	ATOM	1750	CG1	ILE	412	15.170	61.407	83.604	1.00
	14.89								
30	ATOM	1751	CD1	ILE	412	16.276	62.054	82.716	1.00
	14.65								
	ATOM	1752	C	ILE	412	12.055	62.706	85.440	1.00
	14.72								
	ATOM	1753	O	ILE	412	12.011	62.786	86.680	1.00
	14.64								
35	ATOM	1754	N	ASN	413	11.264	63.399	84.631	1.00
	14.43								
	ATOM	1755	H	ASN	413	11.230	63.156	83.690	1.00
	0.00								
40	ATOM	1756	CA	ASN	413	10.414	64.489	85.121	1.00
	15.79								
	ATOM	1757	CB	ASN	413	10.114	65.441	83.970	1.00
	14.72								
	ATOM	1758	CG	ASN	413	11.378	66.139	83.446	1.00
	15.01								
45	ATOM	1759	OD1	ASN	413	12.294	66.321	84.194	1.00
	17.88								
	ATOM	1760	ND2	ASN	413	11.434	66.458	82.163	1.00
	16.83								
50	ATOM	1761	HD21	ASN	413	10.665	66.243	81.576	1.00
	0.00								
	ATOM	1762	HD22	ASN	413	12.214	66.918	81.835	1.00
	0.00								
	ATOM	1763	C	ASN	413	9.123	64.113	85.824	1.00
	16.85								
55	ATOM	1764	O	ASN	413	8.785	64.680	86.890	1.00
	17.54								
	ATOM	1765	N	TYR	414	8.403	63.169	85.228	1.00
	17.67								

	ATOM	1766	H	TYR	414	8.738	62.752	84.418	1.00
	0.00								
	ATOM	1767	CA	TYR	414	7.107	62.737	85.758	1.00
	17.90								
5	ATOM	1768	CB	TYR	414	6.048	62.839	84.688	1.00
	19.12								
	ATOM	1769	CG	TYR	414	6.139	64.092	83.865	1.00
	20.66								
10	ATOM	1770	CD1	TYR	414	6.223	65.333	84.472	1.00
	22.51								
	ATOM	1771	CE1	TYR	414	6.327	66.490	83.720	1.00
	22.39								
	ATOM	1772	CD2	TYR	414	6.149	64.043	82.495	1.00
	21.40								
15	ATOM	1773	CE2	TYR	414	6.247	65.200	81.720	1.00
	22.03								
	ATOM	1774	CZ	TYR	414	6.336	66.425	82.358	1.00
	23.14								
	ATOM	1775	OH	TYR	414	6.444	67.606	81.635	1.00
	25.51								
20	ATOM	1776	HH	TYR	414	6.465	68.348	82.243	1.00
	0.00								
	ATOM	1777	C	TYR	414	7.038	61.353	86.348	1.00
	17.97								
25	ATOM	1778	O	TYR	414	6.048	61.020	87.011	1.00
	18.36								
	ATOM	1779	N	GLY	415	8.045	60.530	86.081	1.00
	16.60								
	ATOM	1780	H	GLY	415	8.790	60.830	85.527	1.00
	0.00								
30	ATOM	1781	CA	GLY	415	8.034	59.166	86.595	1.00
	16.06								
	ATOM	1782	C	GLY	415	7.196	58.284	85.676	1.00
	15.74								
35	ATOM	1783	O	GLY	415	6.907	57.111	86.023	1.00
	16.26								
	ATOM	1784	N	THR	416	6.808	58.837	84.532	1.00
	14.68								
	ATOM	1785	H	THR	416	7.093	59.754	84.321	1.00
	0.00								
40	ATOM	1786	CA	THR	416	5.973	58.145	83.554	1.00
	15.57								
	ATOM	1787	CB	THR	416	5.028	59.079	82.786	1.00
	17.57								
45	ATOM	1788	OG1	THR	416	5.779	60.132	82.169	1.00
	19.26								
	ATOM	1789	HG1	THR	416	6.231	60.639	82.836	1.00
	0.00								
	ATOM	1790	CG2	THR	416	3.995	59.699	83.736	1.00
	19.13								
50	ATOM	1791	C	THR	416	6.800	57.401	82.524	1.00
	14.21								
	ATOM	1792	O	THR	416	7.593	57.995	81.760	1.00
	15.67								
55	ATOM	1793	N	PHE	417	6.511	56.115	82.405	1.00
	12.09								
	ATOM	1794	H	PHE	417	5.818	55.722	82.957	1.00
	0.00								

	ATOM 11.30	1795	CA	PHE	417	7.231	55.271	81.441	1.00
	ATOM 11.23	1796	CB	PHE	417	7.924	54.118	82.168	1.00
5	ATOM 10.41	1797	CG	PHE	417	9.090	54.535	82.997	1.00
	ATOM 9.97	1798	CD1	PHE	417	8.916	54.991	84.293	1.00
10	ATOM 9.23	1799	CD2	PHE	417	10.388	54.409	82.486	1.00
	ATOM 12.35	1800	CE1	PHE	417	10.009	55.309	85.091	1.00
	ATOM 9.51	1801	CE2	PHE	417	11.462	54.713	83.243	1.00
15	ATOM 9.78	1802	CZ	PHE	417	11.311	55.166	84.558	1.00
	ATOM 11.10	1803	C	PHE	417	6.300	54.610	80.450	1.00
20	ATOM 11.90	1804	O	PHE	417	5.198	54.172	80.821	1.00
	ATOM 10.15	1805	N	THR	418	6.715	54.593	79.183	1.00
	ATOM 0.00	1806	H	THR	418	7.525	55.089	78.952	1.00
25	ATOM 9.74	1807	CA	THR	418	5.982	53.852	78.127	1.00
	ATOM 10.54	1808	CB	THR	418	5.140	54.725	77.164	1.00
30	ATOM 12.41	1809	OG1	THR	418	5.972	55.497	76.304	1.00
	ATOM 0.00	1810	HG1	THR	418	6.542	54.913	75.812	1.00
	ATOM 12.42	1811	CG2	THR	418	4.244	55.659	77.943	1.00
35	ATOM 8.07	1812	C	THR	418	7.019	53.150	77.269	1.00
	ATOM 8.89	1813	O	THR	418	8.245	53.304	77.522	1.00
40	ATOM 7.32	1814	N	ILE	419	6.569	52.350	76.289	1.00
	ATOM 0.00	1815	H	ILE	419	5.621	52.202	76.165	1.00
	ATOM 6.24	1816	CA	ILE	419	7.551	51.741	75.415	1.00
45	ATOM 6.09	1817	CB	ILE	419	6.871	50.730	74.410	1.00
	ATOM 5.86	1818	CG2	ILE	419	6.082	51.511	73.346	1.00
50	ATOM 6.62	1819	CG1	ILE	419	7.893	49.841	73.669	1.00
	ATOM 7.43	1820	CD1	ILE	419	8.604	48.853	74.599	1.00
	ATOM 6.54	1821	C	ILE	419	8.387	52.838	74.702	1.00
55	ATOM 6.86	1822	O	ILE	419	9.534	52.607	74.300	1.00
	ATOM 7.02	1823	N	LYS	420	7.813	54.056	74.546	1.00

	ATOM	1824	H	LYS	420	6.898	54.194	74.832	1.00
	0.00								
	ATOM	1825	CA	LYS	420	8.559	55.133	73.922	1.00
	5.39								
5	ATOM	1826	CB	LYS	420	7.616	56.295	73.620	1.00
	6.87								
	ATOM	1827	CG	LYS	420	6.565	55.987	72.532	1.00
	7.82								
10	ATOM	1828	CD	LYS	420	7.083	55.455	71.200	1.00
	7.78								
	ATOM	1829	CE	LYS	420	5.959	55.208	70.159	1.00
	8.97								
	ATOM	1830	NZ	LYS	420	6.486	54.574	68.971	1.00
	10.61								
15	ATOM	1831	HZ1	LYS	420	6.912	53.650	69.230	1.00
	0.00								
	ATOM	1832	HZ2	LYS	420	7.218	55.159	68.535	1.00
	0.00								
20	ATOM	1833	HZ3	LYS	420	5.725	54.392	68.287	1.00
	0.00								
	ATOM	1834	C	LYS	420	9.739	55.639	74.781	1.00
	5.31								
	ATOM	1835	O	LYS	420	10.681	56.226	74.222	1.00
	5.39								
25	ATOM	1836	N	SER	421	9.680	55.442	76.096	0.84
	3.40								
	ATOM	1837	H	SER	421	8.867	55.039	76.461	1.00
	0.00								
30	ATOM	1838	CA	SER	421	10.775	55.769	77.032	0.84
	4.39								
	ATOM	1839	CB	SER	421	10.275	55.628	78.498	0.84
	6.53								
	ATOM	1840	OG	SER	421	9.071	56.399	78.631	0.84
	8.78								
35	ATOM	1841	HG	SER	421	9.278	57.326	78.452	1.00
	0.00								
	ATOM	1842	C	SER	421	11.898	54.774	76.723	0.84
	4.17								
40	ATOM	1843	O	SER	421	13.080	55.127	76.738	0.84
	4.10								
	ATOM	1844	N	ASP	422	11.518	53.528	76.443	1.00
	5.50								
	ATOM	1845	H	ASP	422	10.584	53.272	76.460	1.00
	0.00								
45	ATOM	1846	CA	ASP	422	12.551	52.540	76.115	1.00
	4.75								
	ATOM	1847	CB	ASP	422	11.990	51.100	76.040	1.00
	6.52								
50	ATOM	1848	CG	ASP	422	11.724	50.489	77.392	1.00
	7.22								
	ATOM	1849	OD1	ASP	422	12.227	50.919	78.460	1.00
	7.55								
	ATOM	1850	OD2	ASP	422	10.893	49.543	77.380	1.00
	9.72								
55	ATOM	1851	C	ASP	422	13.207	52.883	74.792	1.00
	4.30								
	ATOM	1852	O	ASP	422	14.360	52.585	74.579	1.00
	4.83								



	ATOM 2.28	1853	N	VAL	423	12.452	53.444	73.844	1.00
	ATOM 0.00	1854	H	VAL	423	11.503	53.580	74.014	1.00
5	ATOM 3.14	1855	CA	VAL	423	12.995	53.847	72.548	1.00
	ATOM 4.31	1856	CB	VAL	423	11.870	54.339	71.631	1.00
10	ATOM 4.11	1857	CG1	VAL	423	12.411	55.008	70.401	1.00
	ATOM 3.98	1858	CG2	VAL	423	11.022	53.087	71.158	1.00
	ATOM 3.64	1859	C	VAL	423	14.065	54.930	72.776	1.00
15	ATOM 3.31	1860	O	VAL	423	15.079	54.888	72.121	1.00
	ATOM 3.87	1861	N	TRP	424	13.786	55.881	73.692	1.00
20	ATOM 0.00	1862	H	TRP	424	12.905	55.865	74.141	1.00
	ATOM 4.26	1863	CA	TRP	424	14.793	56.897	74.008	1.00
	ATOM 4.58	1864	CB	TRP	424	14.230	57.847	75.110	1.00
25	ATOM 5.10	1865	CG	TRP	424	15.218	58.908	75.524	1.00
	ATOM 5.67	1866	CD2	TRP	424	15.190	60.294	75.147	1.00
30	ATOM 5.11	1867	CE2	TRP	424	16.342	60.888	75.701	1.00
	ATOM 5.52	1868	CE3	TRP	424	14.271	61.078	74.416	1.00
	ATOM 5.45	1869	CD1	TRP	424	16.339	58.728	76.275	1.00
35	ATOM 6.04	1870	NE1	TRP	424	17.025	59.928	76.388	1.00
	ATOM 0.00	1871	HE1	TRP	424	17.870	60.056	76.863	1.00
40	ATOM 4.89	1872	CZ2	TRP	424	16.629	62.268	75.548	1.00
	ATOM 5.83	1873	CZ3	TRP	424	14.539	62.462	74.268	1.00
	ATOM 6.03	1874	CH2	TRP	424	15.722	63.031	74.842	1.00
45	ATOM 4.03	1875	C	TRP	424	16.085	56.161	74.467	1.00
	ATOM 3.83	1876	O	TRP	424	17.190	56.513	74.008	1.00
50	ATOM 2.00	1877	N	SER	425	15.925	55.282	75.435	0.74
	ATOM 0.00	1878	H	SER	425	15.019	55.122	75.789	1.00
	ATOM 2.00	1879	CA	SER	425	17.053	54.556	76.005	0.74
55	ATOM 2.00	1880	CB	SER	425	16.530	53.590	77.044	0.74
	ATOM 3.21	1881	OG	SER	425	15.918	54.259	78.131	0.74

	ATOM 0.00	1882	HG	SER	425	15.179	54.793	77.793	1.00
	ATOM 2.61	1883	C	SER	425	17.818	53.835	74.915	0.74
5	ATOM 2.00	1884	O	SER	425	19.051	53.752	74.965	0.74
	ATOM 3.61	1885	N	PHE	426	17.094	53.193	73.991	1.00
10	ATOM 0.00	1886	H	PHE	426	16.127	53.188	74.079	1.00
	ATOM 3.25	1887	CA	PHE	426	17.736	52.496	72.870	1.00
	ATOM 3.78	1888	CB	PHE	426	16.676	51.897	71.952	1.00
15	ATOM 2.99	1889	CG	PHE	426	17.238	51.086	70.836	1.00
	ATOM 3.53	1890	CD1	PHE	426	17.786	49.829	71.097	1.00
20	ATOM 3.33	1891	CD2	PHE	426	17.250	51.580	69.532	1.00
	ATOM 3.60	1892	CE1	PHE	426	18.341	49.085	70.044	1.00
	ATOM 4.33	1893	CE2	PHE	426	17.809	50.846	68.476	1.00
25	ATOM 2.26	1894	CZ	PHE	426	18.369	49.551	68.755	1.00
	ATOM 4.19	1895	C	PHE	426	18.651	53.445	72.081	1.00
30	ATOM 4.20	1896	O	PHE	426	19.742	53.059	71.648	1.00
	ATOM 3.62	1897	N	GLY	427	18.198	54.674	71.882	1.00
	ATOM 0.00	1898	H	GLY	427	17.307	54.940	72.200	1.00
35	ATOM 4.54	1899	CA	GLY	427	19.084	55.593	71.185	1.00
	ATOM 2.74	1900	C	GLY	427	20.399	55.766	71.964	1.00
40	ATOM 3.03	1901	O	GLY	427	21.434	55.911	71.318	1.00
	ATOM 2.87	1902	N	ILE	428	20.319	55.912	73.279	1.00
	ATOM 0.00	1903	H	ILE	428	19.437	55.901	73.706	1.00
45	ATOM 2.59	1904	CA	ILE	428	21.504	56.074	74.098	1.00
	ATOM 3.04	1905	CB	ILE	428	21.141	56.366	75.562	1.00
50	ATOM 4.80	1906	CG2	ILE	428	22.405	56.537	76.405	1.00
	ATOM 3.89	1907	CG1	ILE	428	20.191	57.589	75.641	1.00
	ATOM 5.08	1908	CD1	ILE	428	20.795	58.952	75.169	1.00
55	ATOM 4.70	1909	C	ILE	428	22.326	54.782	73.967	1.00
	ATOM 4.68	1910	O	ILE	428	23.565	54.797	73.895	1.00

	ATOM 3.61	1911	N	LEU	429	21.634	53.638	74.001	1.00
	ATOM 0.00	1912	H	LEU	429	20.677	53.651	74.121	1.00
5	ATOM 4.69	1913	CA	LEU	429	22.384	52.370	73.868	1.00
	ATOM 5.24	1914	CB	LEU	429	21.388	51.184	74.005	1.00
10	ATOM 7.89	1915	CG	LEU	429	21.962	49.763	74.217	1.00
	ATOM 6.69	1916	CD1	LEU	429	20.803	48.836	74.587	1.00
	ATOM 11.59	1917	CD2	LEU	429	22.640	49.187	73.029	1.00
15	ATOM 5.16	1918	C	LEU	429	23.177	52.328	72.528	1.00
	ATOM 6.28	1919	O	LEU	429	24.305	51.787	72.453	1.00
20	ATOM 4.85	1920	N	LEU	430	22.593	52.823	71.446	1.00
	ATOM 0.00	1921	H	LEU	430	21.691	53.201	71.500	1.00
	ATOM 4.09	1922	CA	LEU	430	23.267	52.837	70.158	1.00
25	ATOM 4.96	1923	CB	LEU	430	22.427	53.499	69.089	1.00
	ATOM 4.92	1924	CG	LEU	430	21.181	52.736	68.615	1.00
30	ATOM 5.50	1925	CD1	LEU	430	20.499	53.563	67.511	1.00
	ATOM 5.64	1926	CD2	LEU	430	21.616	51.344	68.039	1.00
	ATOM 5.14	1927	C	LEU	430	24.603	53.638	70.329	1.00
35	ATOM 4.63	1928	O	LEU	430	25.588	53.283	69.729	1.00
	ATOM 4.15	1929	N	THR	431	24.631	54.686	71.143	1.00
40	ATOM 0.00	1930	H	THR	431	23.820	54.932	71.629	1.00
	ATOM 4.99	1931	CA	THR	431	25.907	55.419	71.331	1.00
	ATOM 3.81	1932	CB	THR	431	25.775	56.788	72.128	1.00
45	ATOM 5.06	1933	OG1	THR	431	25.535	56.607	73.521	1.00
	ATOM 0.00	1934	HG1	THR	431	26.285	56.125	73.912	1.00
50	ATOM 5.88	1935	CG2	THR	431	24.682	57.599	71.511	1.00
	ATOM 5.33	1936	C	THR	431	26.916	54.513	72.030	1.00
	ATOM 6.80	1937	O	THR	431	28.093	54.577	71.725	1.00
55	ATOM 4.68	1938	N	GLU	432	26.460	53.731	72.981	1.00
	ATOM 0.00	1939	H	GLU	432	25.506	53.772	73.212	1.00

5	ATOM 5.06	1940	CA	GLU	432	27.364	52.789	73.682	1.00
	ATOM 5.36	1941	CB	GLU	432	26.667	52.087	74.838	1.00
	ATOM 5.97	1942	CG	GLU	432	26.109	52.989	75.912	1.00
	ATOM 7.12	1943	CD	GLU	432	25.472	52.155	76.997	1.00
	ATOM 7.06	1944	OE1	GLU	432	24.291	51.757	76.844	1.00
10	ATOM 9.86	1945	OE2	GLU	432	26.173	51.808	77.959	1.00
	ATOM 5.32	1946	C	GLU	432	27.937	51.795	72.693	1.00
	ATOM 6.10	1947	O	GLU	432	29.106	51.418	72.820	1.00
15	ATOM 5.34	1948	N	ILE	433	27.142	51.324	71.755	1.00
	ATOM 0.00	1949	H	ILE	433	26.222	51.617	71.690	1.00
	ATOM 6.31	1950	CA	ILE	433	27.658	50.357	70.802	1.00
20	ATOM 6.14	1951	CB	ILE	433	26.526	49.749	69.990	1.00
	ATOM 8.93	1952	CG2	ILE	433	27.062	49.005	68.759	1.00
	ATOM 7.33	1953	CG1	ILE	433	25.675	48.945	70.934	1.00
25	ATOM 7.92	1954	CD1	ILE	433	24.435	48.475	70.211	1.00
	ATOM 7.78	1955	C	ILE	433	28.729	50.918	69.892	1.00
	ATOM 8.65	1956	O	ILE	433	29.844	50.386	69.783	1.00
30	ATOM 7.33	1957	N	VAL	434	28.471	52.097	69.358	1.00
	ATOM 0.00	1958	H	VAL	434	27.642	52.564	69.591	1.00
	ATOM 10.01	1959	CA	VAL	434	29.398	52.699	68.407	1.00
35	ATOM 11.32	1960	CB	VAL	434	28.641	53.800	67.535	1.00
	ATOM 12.92	1961	CG1	VAL	434	28.540	55.063	68.298	1.00
	ATOM 14.45	1962	CG2	VAL	434	29.302	53.940	66.124	1.00
40	ATOM 8.29	1963	C	VAL	434	30.685	53.258	69.077	1.00
	ATOM 10.84	1964	O	VAL	434	31.717	53.362	68.411	1.00
	ATOM 8.17	1965	N	THR	435	30.662	53.505	70.374	1.00
45	ATOM 0.00	1966	H	THR	435	29.839	53.362	70.876	1.00
	ATOM 9.24	1967	CA	THR	435	31.862	54.008	71.060	1.00
	ATOM 8.60	1968	CB	THR	435	31.531	55.127	72.051	1.00

	ATOM 9.12	1969	OG1	THR	435	30.671	54.649	73.101	1.00
	ATOM 0.00	1970	HG1	THR	435	30.469	55.385	73.698	1.00
5	ATOM 9.20	1971	CG2	THR	435	30.850	56.305	71.301	1.00
	ATOM 10.34	1972	C	THR	435	32.545	52.895	71.865	1.00
10	ATOM 10.87	1973	O	THR	435	33.336	53.175	72.766	1.00
	ATOM 10.82	1974	N	HIS	436	32.180	51.642	71.590	1.00
	ATOM 0.00	1975	H	HIS	436	31.537	51.471	70.873	1.00
15	ATOM 11.46	1976	CA	HIS	436	32.744	50.530	72.347	1.00
	ATOM 15.05	1977	CB	HIS	436	34.154	50.167	71.849	1.00
20	ATOM 16.72	1978	CG	HIS	436	34.179	49.627	70.461	1.00
	ATOM 18.23	1979	CD2	HIS	436	34.109	50.254	69.243	1.00
	ATOM 18.71	1980	ND1	HIS	436	34.283	48.283	70.183	1.00
25	ATOM 0.00	1981	HD1	HIS	436	34.338	47.562	70.852	1.00
	ATOM 17.96	1982	CE1	HIS	436	34.284	48.090	68.872	1.00
30	ATOM 19.69	1983	NE2	HIS	436	34.177	49.279	68.287	1.00
	ATOM 0.00	1984	HE2	HIS	436	34.183	49.421	67.315	1.00
	ATOM 10.91	1985	C	HIS	436	32.630	50.659	73.865	1.00
35	ATOM 12.67	1986	O	HIS	436	33.569	50.410	74.667	1.00
	ATOM 9.46	1987	N	GLY	437	31.418	51.025	74.291	1.00
40	ATOM 0.00	1988	H	GLY	437	30.733	51.246	73.653	1.00
	ATOM 9.96	1989	CA	GLY	437	31.120	51.097	75.702	1.00
	ATOM 9.49	1990	C	GLY	437	31.404	52.372	76.462	1.00
45	ATOM 11.99	1991	O	GLY	437	31.325	52.346	77.682	1.00
	ATOM 7.77	1992	N	ARG	438	31.665	53.481	75.758	0.58
50	ATOM 0.00	1993	H	ARG	438	31.690	53.422	74.773	1.00
	ATOM 8.40	1994	CA	ARG	438	31.923	54.759	76.429	0.58
	ATOM 8.52	1995	CB	ARG	438	32.404	55.805	75.404	0.58
55	ATOM 11.45	1996	CG	ARG	438	33.030	57.083	75.974	0.58
	ATOM 12.12	1997	CD	ARG	438	33.486	58.066	74.874	0.58

	ATOM 15.11	1998	NE	ARG	438	34.280	59.175	75.424	0.58
	ATOM 0.00	1999	HE	ARG	438	34.611	59.088	76.334	1.00
5	ATOM 16.05	2000	CZ	ARG	438	34.590	60.280	74.744	0.58
	ATOM 17.29	2001	NH1	ARG	438	34.178	60.439	73.497	0.58
10	ATOM 0.00	2002	HH11	ARG	438	33.631	59.718	73.051	1.00
	ATOM 0.00	2003	HH12	ARG	438	34.407	61.263	72.984	1.00
	ATOM 18.16	2004	NH2	ARG	438	35.305	61.241	75.310	0.58
15	ATOM 0.00	2005	HH21	ARG	438	35.597	61.150	76.254	1.00
	ATOM 0.00	2006	HH22	ARG	438	35.513	62.069	74.786	1.00
20	ATOM 7.24	2007	C	ARG	438	30.638	55.243	77.108	0.58
	ATOM 6.64	2008	O	ARG	438	29.530	54.895	76.655	0.58
	ATOM 8.97	2009	N	ILE	439	30.788	56.029	78.180	1.00
25	ATOM 0.00	2010	H	ILE	439	31.697	56.242	78.475	1.00
	ATOM 7.88	2011	CA	ILE	439	29.652	56.580	78.934	1.00
30	ATOM 11.18	2012	CB	ILE	439	30.127	57.170	80.287	1.00
	ATOM 12.03	2013	CG2	ILE	439	29.026	58.024	80.928	1.00
	ATOM 11.96	2014	CG1	ILE	439	30.520	56.025	81.211	1.00
35	ATOM 16.69	2015	CD1	ILE	439	30.889	56.512	82.575	1.00
	ATOM 6.45	2016	C	ILE	439	29.019	57.675	78.071	1.00
40	ATOM 8.58	2017	O	ILE	439	29.737	58.458	77.417	1.00
	ATOM 2.25	2018	N	PRO	440	27.679	57.686	77.963	0.43
	ATOM 2.56	2019	CD	PRO	440	26.708	56.716	78.495	0.43
45	ATOM 2.00	2020	CA	PRO	440	27.017	58.710	77.139	0.43
	ATOM 2.00	2021	CB	PRO	440	25.524	58.333	77.243	0.43
50	ATOM 3.05	2022	CG	PRO	440	25.420	57.491	78.427	0.43
	ATOM 2.00	2023	C	PRO	440	27.283	60.131	77.622	0.43
	ATOM 2.00	2024	O	PRO	440	27.587	60.341	78.809	0.43
55	ATOM 6.28	2025	N	TYR	441	27.115	61.092	76.706	1.00
	ATOM 0.00	2026	H	TYR	441	26.831	60.842	75.803	1.00

5	ATOM 7.84	2027	CA	TYR	441	27.326	62.520	77.049	1.00
	ATOM 7.07	2028	CB	TYR	441	26.252	63.053	77.985	1.00
	ATOM 5.21	2029	CG	TYR	441	24.850	62.862	77.431	1.00
	ATOM 5.50	2030	CD1	TYR	441	24.301	63.763	76.504	1.00
	ATOM 5.71	2031	CE1	TYR	441	22.974	63.602	76.058	1.00
10	ATOM 6.20	2032	CD2	TYR	441	24.055	61.788	77.859	1.00
	ATOM 4.20	2033	CE2	TYR	441	22.764	61.625	77.394	1.00
	ATOM 5.80	2034	CZ	TYR	441	22.220	62.538	76.516	1.00
15	ATOM 4.13	2035	OH	TYR	441	20.911	62.422	76.164	1.00
	ATOM 0.00	2036	HH	TYR	441	20.531	61.671	76.616	1.00
	ATOM 10.50	2037	C	TYR	441	28.682	62.737	77.679	1.00
20	ATOM 9.67	2038	O	TYR	441	28.786	63.196	78.818	1.00
	ATOM 11.93	2039	N	PRO	442	29.724	62.483	76.898	1.00
	ATOM 12.53	2040	CD	PRO	442	29.751	62.094	75.473	1.00
25	ATOM 14.05	2041	CA	PRO	442	31.074	62.657	77.425	1.00
	ATOM 14.29	2042	CB	PRO	442	31.962	62.268	76.249	1.00
	ATOM 13.87	2043	CG	PRO	442	31.118	61.497	75.363	1.00
30	ATOM 13.17	2044	C	PRO	442	31.424	64.044	77.967	1.00
	ATOM 14.67	2045	O	PRO	442	31.135	65.088	77.356	1.00
	ATOM 14.90	2046	N	GLY	443	31.980	64.003	79.166	1.00
35	ATOM 0.00	2047	H	GLY	443	32.060	63.141	79.622	1.00
	ATOM 14.50	2048	CA	GLY	443	32.438	65.214	79.838	1.00
	ATOM 15.21	2049	C	GLY	443	31.325	66.026	80.453	1.00
40	ATOM 15.80	2050	O	GLY	443	31.535	67.204	80.844	1.00
	ATOM 13.04	2051	N	MET	444	30.152	65.405	80.572	1.00
	ATOM 0.00	2052	H	MET	444	30.072	64.473	80.280	1.00
45	ATOM 12.08	2053	CA	MET	444	29.011	66.110	81.133	1.00
	ATOM 12.69	2054	CB	MET	444	27.904	66.247	80.081	1.00
	ATOM 14.01	2055	CG	MET	444	28.365	66.809	78.745	1.00

	ATOM 13.68	2056	SD	MET	444	27.083	66.990	77.487	1.00
	ATOM 13.90	2057	CE	MET	444	25.864	67.933	78.292	1.00
5	ATOM 11.03	2058	C	MET	444	28.428	65.477	82.376	1.00
	ATOM 11.68	2059	O	MET	444	28.302	64.250	82.459	1.00
10	ATOM 9.53	2060	N	THR	445	28.069	66.325	83.341	1.00
	ATOM 0.00	2061	H	THR	445	28.272	67.272	83.235	1.00
	ATOM 9.56	2062	CA	THR	445	27.399	65.870	84.550	1.00
15	ATOM 11.45	2063	CB	THR	445	27.493	66.906	85.671	1.00
	ATOM 11.07	2064	OG1	THR	445	26.787	68.112	85.278	1.00
20	ATOM 0.00	2065	HG1	THR	445	27.181	68.455	84.470	1.00
	ATOM 13.08	2066	CG2	THR	445	28.985	67.231	85.975	1.00
	ATOM 8.59	2067	C	THR	445	25.901	65.711	84.260	1.00
25	ATOM 8.79	2068	O	THR	445	25.408	66.221	83.254	1.00
	ATOM 9.38	2069	N	ASN	446	25.168	65.098	85.182	1.00
30	ATOM 0.00	2070	H	ASN	446	25.593	64.726	85.988	1.00
	ATOM 10.56	2071	CA	ASN	446	23.726	64.966	84.978	1.00
	ATOM 12.38	2072	CB	ASN	446	23.111	64.095	86.052	1.00
35	ATOM 13.78	2073	CG	ASN	446	23.480	62.637	85.888	1.00
	ATOM 14.64	2074	OD1	ASN	446	23.862	62.184	84.813	1.00
40	ATOM 15.96	2075	ND2	ASN	446	23.418	61.909	86.978	1.00
	ATOM 0.00	2076	HD21	ASN	446	23.185	62.332	87.802	1.00
	ATOM 0.00	2077	HD22	ASN	446	23.635	60.964	86.897	1.00
45	ATOM 10.53	2078	C	ASN	446	22.986	66.304	84.875	1.00
	ATOM 10.29	2079	O	ASN	446	22.121	66.460	84.023	1.00
50	ATOM 11.41	2080	N	PRO	447	23.348	67.303	85.717	1.00
	ATOM 11.07	2081	CD	PRO	447	24.130	67.277	86.969	1.00
	ATOM 11.37	2082	CA	PRO	447	22.623	68.576	85.573	1.00
55	ATOM 11.98	2083	CB	PRO	447	23.188	69.426	86.729	1.00
	ATOM 12.44	2084	CG	PRO	447	23.475	68.401	87.765	1.00



	ATOM 11.25	2085	C	PRO	447	22.917	69.197	84.199	1.00
	ATOM 10.58	2086	O	PRO	447	22.059	69.857	83.602	1.00
5	ATOM 10.17	2087	N	GLU	448	24.130	69.009	83.690	1.00
	ATOM 0.00	2088	H	GLU	448	24.800	68.533	84.219	1.00
10	ATOM 9.24	2089	CA	GLU	448	24.477	69.552	82.365	1.00
	ATOM 9.39	2090	CB	GLU	448	25.978	69.405	82.046	1.00
	ATOM 12.36	2091	CG	GLU	448	26.812	70.398	82.851	1.00
15	ATOM 14.85	2092	CD	GLU	448	28.303	70.227	82.678	1.00
	ATOM 12.78	2093	OE1	GLU	448	28.849	69.096	82.698	1.00
20	ATOM 18.02	2094	OE2	GLU	448	28.988	71.270	82.581	1.00
	ATOM 8.38	2095	C	GLU	448	23.670	68.859	81.257	1.00
	ATOM 8.27	2096	O	GLU	448	23.216	69.499	80.322	1.00
25	ATOM 7.49	2097	N	VAL	449	23.482	67.544	81.378	1.00
	ATOM 0.00	2098	H	VAL	449	23.883	67.055	82.131	1.00
30	ATOM 6.61	2099	CA	VAL	449	22.714	66.799	80.376	1.00
	ATOM 5.82	2100	CB	VAL	449	22.734	65.268	80.701	1.00
	ATOM 7.81	2101	CG1	VAL	449	21.720	64.527	79.865	1.00
35	ATOM 7.31	2102	CG2	VAL	449	24.134	64.734	80.451	1.00
	ATOM 5.47	2103	C	VAL	449	21.285	67.318	80.384	1.00
40	ATOM 6.04	2104	O	VAL	449	20.748	67.638	79.333	1.00
	ATOM 3.36	2105	N	ILE	450	20.725	67.486	81.573	0.60
	ATOM 0.00	2106	H	ILE	450	21.259	67.331	82.377	1.00
45	ATOM 4.33	2107	CA	ILE	450	19.344	67.957	81.702	0.60
	ATOM 4.13	2108	CB	ILE	450	18.921	67.934	83.180	0.60
50	ATOM 4.27	2109	CG2	ILE	450	17.613	68.709	83.354	0.60
	ATOM 4.38	2110	CG1	ILE	450	18.739	66.471	83.617	0.60
	ATOM 6.27	2111	CD1	ILE	450	18.559	66.309	85.109	0.60
55	ATOM 5.04	2112	C	ILE	450	19.170	69.350	81.111	0.60
	ATOM 3.63	2113	O	ILE	450	18.260	69.601	80.309	0.60

	ATOM 7.77	2114	N	GLN	451	20.131	70.208	81.426	1.00
	ATOM 0.00	2115	H	GLN	451	20.861	69.891	82.002	1.00
5	ATOM 10.54	2116	CA	GLN	451	20.122	71.594	80.937	1.00
	ATOM 14.15	2117	CB	GLN	451	21.324	72.380	81.561	1.00
10	ATOM 20.16	2118	CG	GLN	451	21.528	73.883	81.175	1.00
	ATOM 22.13	2119	CD	GLN	451	22.760	74.552	81.885	1.00
	ATOM 26.32	2120	OE1	GLN	451	22.612	75.605	82.517	1.00
15	ATOM 25.19	2121	NE2	GLN	451	23.968	73.963	81.736	1.00
	ATOM 0.00	2122	HE21	GLN	451	24.064	73.148	81.192	1.00
20	ATOM 0.00	2123	HE22	GLN	451	24.759	74.379	82.166	1.00
	ATOM 10.44	2124	C	GLN	451	20.158	71.595	79.398	1.00
	ATOM 9.35	2125	O	GLN	451	19.349	72.280	78.730	1.00
25	ATOM 8.81	2126	N	ASN	452	21.048	70.798	78.815	1.00
	ATOM 0.00	2127	H	ASN	452	21.629	70.238	79.354	1.00
30	ATOM 8.91	2128	CA	ASN	452	21.198	70.776	77.359	1.00
	ATOM 12.05	2129	CB	ASN	452	22.408	69.915	76.974	1.00
	ATOM 15.97	2130	CG	ASN	452	23.700	70.670	76.921	1.00
35	ATOM 21.26	2131	OD1	ASN	452	24.703	70.170	76.339	1.00
	ATOM 16.96	2132	ND2	ASN	452	23.708	71.858	77.460	1.00
40	ATOM 0.00	2133	HD21	ASN	452	22.903	72.231	77.860	1.00
	ATOM 0.00	2134	HD22	ASN	452	24.554	72.362	77.417	1.00
	ATOM 7.97	2135	C	ASN	452	19.941	70.203	76.681	1.00
45	ATOM 7.99	2136	O	ASN	452	19.478	70.736	75.669	1.00
	ATOM 7.30	2137	N	LEU	453	19.412	69.105	77.224	1.00
50	ATOM 0.00	2138	H	LEU	453	19.813	68.691	78.019	1.00
	ATOM 7.09	2139	CA	LEU	453	18.236	68.533	76.635	1.00
	ATOM 7.90	2140	CB	LEU	453	17.793	67.274	77.383	1.00
55	ATOM 7.82	2141	CG	LEU	453	18.757	66.088	77.240	1.00
	ATOM 8.30	2142	CD1	LEU	453	18.258	64.959	78.206	1.00

	ATOM 6.41	2143	CD2	LEU	453	18.832	65.579	75.764	1.00
	ATOM 6.46	2144	C	LEU	453	17.110	69.560	76.580	1.00
5	ATOM 7.59	2145	O	LEU	453	16.336	69.581	75.624	1.00
	ATOM 7.77	2146	N	GLU	454	16.956	70.305	77.665	1.00
10	ATOM 0.00	2147	H	GLU	454	17.564	70.200	78.417	1.00
	ATOM 9.34	2148	CA	GLU	454	15.883	71.291	77.719	1.00
	ATOM 12.04	2149	CB	GLU	454	15.706	71.786	79.152	1.00
15	ATOM 17.04	2150	CG	GLU	454	15.054	70.656	79.968	1.00
	ATOM 21.47	2151	CD	GLU	454	14.908	70.931	81.436	1.00
20	ATOM 23.68	2152	OE1	GLU	454	15.423	71.959	81.918	1.00
	ATOM 22.13	2153	OE2	GLU	454	14.257	70.098	82.113	1.00
	ATOM 9.43	2154	C	GLU	454	16.008	72.408	76.729	1.00
25	ATOM 10.25	2155	O	GLU	454	14.988	73.045	76.413	1.00
	ATOM 8.46	2156	N	ARG	455	17.225	72.647	76.240	1.00
30	ATOM 0.00	2157	H	ARG	455	17.979	72.143	76.580	1.00
	ATOM 7.95	2158	CA	ARG	455	17.474	73.668	75.208	1.00
	ATOM 9.51	2159	CB	ARG	455	18.952	74.159	75.219	1.00
35	ATOM 11.91	2160	CG	ARG	455	19.395	74.768	76.525	1.00
	ATOM 12.88	2161	CD	ARG	455	20.827	75.305	76.457	1.00
40	ATOM 10.71	2162	NE	ARG	455	20.908	76.335	75.408	1.00
	ATOM 0.00	2163	HE	ARG	455	20.106	76.545	74.935	1.00
	ATOM 10.70	2164	CZ	ARG	455	22.038	76.973	75.060	1.00
45	ATOM 11.36	2165	NH1	ARG	455	23.215	76.666	75.617	1.00
	ATOM 0.00	2166	HH11	ARG	455	23.266	75.965	76.330	1.00
50	ATOM 0.00	2167	HH12	ARG	455	24.039	77.158	75.346	1.00
	ATOM 7.80	2168	NH2	ARG	455	21.945	78.048	74.293	1.00
	ATOM 0.00	2169	HH21	ARG	455	21.046	78.355	73.986	1.00
55	ATOM 0.00	2170	HH22	ARG	455	22.769	78.538	74.007	1.00
	ATOM 7.19	2171	C	ARG	455	17.179	73.119	73.811	1.00

	ATOM 7.14	2172	O	ARG	455	17.216	73.811	72.829	1.00
	ATOM 6.37	2173	N	GLY	456	16.969	71.797	73.694	1.00
5	ATOM 0.00	2174	H	GLY	456	16.986	71.232	74.489	1.00
	ATOM 6.14	2175	CA	GLY	456	16.732	71.194	72.404	1.00
10	ATOM 5.95	2176	C	GLY	456	17.969	70.497	71.856	1.00
	ATOM 7.78	2177	O	GLY	456	17.942	69.907	70.766	1.00
	ATOM 5.47	2178	N	TYR	457	19.042	70.542	72.619	1.00
15	ATOM 0.00	2179	H	TYR	457	19.023	71.005	73.485	1.00
	ATOM 5.37	2180	CA	TYR	457	20.256	69.856	72.151	1.00
20	ATOM 5.38	2181	CB	TYR	457	21.503	70.284	72.933	1.00
	ATOM 6.50	2182	CG	TYR	457	21.979	71.718	72.715	1.00
	ATOM 7.95	2183	CD1	TYR	457	21.495	72.490	71.683	1.00
25	ATOM 8.83	2184	CE1	TYR	457	21.991	73.794	71.454	1.00
	ATOM 8.19	2185	CD2	TYR	457	22.957	72.246	73.530	1.00
30	ATOM 9.65	2186	CE2	TYR	457	23.470	73.538	73.317	1.00
	ATOM 8.91	2187	CZ	TYR	457	22.980	74.293	72.276	1.00
	ATOM 9.80	2188	OH	TYR	457	23.541	75.554	72.010	1.00
35	ATOM 0.00	2189	HH	TYR	457	23.086	75.971	71.281	1.00
	ATOM 5.41	2190	C	TYR	457	20.098	68.387	72.439	1.00
40	ATOM 6.17	2191	O	TYR	457	19.297	68.006	73.292	1.00
	ATOM 4.55	2192	N	ARG	458	20.858	67.586	71.693	1.00
	ATOM 0.00	2193	H	ARG	458	21.374	67.973	70.938	1.00
45	ATOM 4.84	2194	CA	ARG	458	20.935	66.138	71.975	1.00
	ATOM 3.99	2195	CB	ARG	458	20.254	65.327	70.888	1.00
50	ATOM 4.20	2196	CG	ARG	458	18.701	65.543	70.874	1.00
	ATOM 5.10	2197	CD	ARG	458	18.037	65.155	72.167	1.00
	ATOM 5.88	2198	NE	ARG	458	16.566	65.315	72.102	1.00
55	ATOM 0.00	2199	HE	ARG	458	16.065	64.635	71.605	1.00
	ATOM 7.42	2200	CZ	ARG	458	15.875	66.325	72.647	1.00

	ATOM	2201	NH1	ARG	458	16.516	67.326	73.280	1.00
	7.90								
	ATOM	2202	HH11	ARG	458	17.507	67.309	73.327	1.00
	0.00								
5	ATOM	2203	HH12	ARG	458	15.995	68.070	73.677	1.00
	0.00								
	ATOM	2204	NH2	ARG	458	14.532	66.252	72.649	1.00
	7.34								
10	ATOM	2205	HH21	ARG	458	14.066	65.468	72.248	1.00
	0.00								
	ATOM	2206	HH22	ARG	458	13.996	66.998	73.052	1.00
	0.00								
	ATOM	2207	C	ARG	458	22.412	65.805	72.031	1.00
	6.43								
15	ATOM	2208	O	ARG	458	23.290	66.676	71.861	1.00
	7.40								
	ATOM	2209	N	MET	459	22.712	64.543	72.353	1.00
	5.51								
	ATOM	2210	H	MET	459	22.005	63.887	72.532	1.00
	0.00								
20	ATOM	2211	CA	MET	459	24.111	64.152	72.485	1.00
	5.95								
	ATOM	2212	CB	MET	459	24.216	62.643	72.743	1.00
	6.59								
25	ATOM	2213	CG	MET	459	25.571	62.339	73.338	1.00
	7.84								
	ATOM	2214	SD	MET	459	25.818	60.536	73.560	1.00
	6.28								
	ATOM	2215	CE	MET	459	24.337	60.011	74.326	1.00
	6.82								
30	ATOM	2216	C	MET	459	24.932	64.502	71.235	1.00
	5.23								
	ATOM	2217	O	MET	459	24.508	64.251	70.107	1.00
	5.48								
35	ATOM	2218	N	VAL	460	26.145	65.055	71.436	1.00
	5.55								
	ATOM	2219	H	VAL	460	26.446	65.223	72.340	1.00
	0.00								
	ATOM	2220	CA	VAL	460	27.027	65.394	70.348	1.00
	7.12								
40	ATOM	2221	CB	VAL	460	28.303	66.024	70.947	1.00
	7.96								
	ATOM	2222	CG1	VAL	460	29.437	66.112	69.917	1.00
	9.36								
45	ATOM	2223	CG2	VAL	460	27.916	67.395	71.546	1.00
	9.72								
	ATOM	2224	C	VAL	460	27.385	64.139	69.536	1.00
	6.92								
	ATOM	2225	O	VAL	460	27.514	63.072	70.135	1.00
	7.43								
50	ATOM	2226	N	ARG	461	27.522	64.250	68.228	1.00
	7.25								
	ATOM	2227	H	ARG	461	27.347	65.105	67.790	1.00
	0.00								
55	ATOM	2228	CA	ARG	461	27.914	63.079	67.409	1.00
	6.83								
	ATOM	2229	CB	ARG	461	28.282	63.474	65.983	1.00
	7.15								

	ATOM 7.70	2230	CG	ARG	461	27.117	64.029	65.198	1.00
	ATOM 8.56	2231	CD	ARG	461	27.573	64.576	63.843	1.00
5	ATOM 8.40	2232	NE	ARG	461	26.394	64.870	63.034	1.00
	ATOM 0.00	2233	HE	ARG	461	26.059	64.166	62.465	1.00
10	ATOM 9.86	2234	CZ	ARG	461	25.742	66.033	63.030	1.00
	ATOM 8.75	2235	NH1	ARG	461	26.151	67.061	63.803	1.00
	ATOM 0.00	2236	HH11	ARG	461	26.936	66.957	64.397	1.00
15	ATOM 0.00	2237	HH12	ARG	461	25.636	67.921	63.781	1.00
	ATOM 7.82	2238	NH2	ARG	461	24.679	66.147	62.247	1.00
20	ATOM 0.00	2239	HH21	ARG	461	24.374	65.365	61.712	1.00
	ATOM 0.00	2240	HH22	ARG	461	24.153	67.001	62.230	1.00
	ATOM 8.87	2241	C	ARG	461	29.138	62.381	67.997	1.00
25	ATOM 9.79	2242	O	ARG	461	30.209	63.004	68.196	1.00
	ATOM 9.26	2243	N	PRO	462	28.978	61.082	68.311	1.00
30	ATOM 9.57	2244	CD	PRO	462	27.722	60.309	68.426	1.00
	ATOM 11.18	2245	CA	PRO	462	30.114	60.354	68.863	1.00
	ATOM 9.51	2246	CB	PRO	462	29.536	58.948	69.103	1.00
35	ATOM 9.93	2247	CG	PRO	462	28.094	59.166	69.361	1.00
	ATOM 12.44	2248	C	PRO	462	31.183	60.273	67.811	1.00
40	ATOM 12.97	2249	O	PRO	462	30.902	60.304	66.613	1.00
	ATOM 15.65	2250	N	ASP	463	32.429	60.068	68.249	1.00
	ATOM 0.00	2251	H	ASP	463	32.611	60.028	69.194	1.00
45	ATOM 17.53	2252	CA	ASP	463	33.527	59.896	67.309	1.00
	ATOM 19.87	2253	CB	ASP	463	34.846	59.645	68.056	1.00
50	ATOM 22.64	2254	CG	ASP	463	35.394	60.883	68.735	1.00
	ATOM 26.57	2255	OD1	ASP	463	35.069	62.011	68.287	1.00
	ATOM 24.80	2256	OD2	ASP	463	36.183	60.725	69.700	1.00
55	ATOM 17.79	2257	C	ASP	463	33.272	58.684	66.423	1.00
	ATOM 18.57	2258	O	ASP	463	32.783	57.645	66.910	1.00

	ATOM 18.96	2259	N	ASN	464	33.566	58.856	65.134	1.00
	ATOM 0.00	2260	H	ASN	464	33.918	59.727	64.850	1.00
5	ATOM 19.94	2261	CA	ASN	464	33.426	57.827	64.104	1.00
	ATOM 23.16	2262	CB	ASN	464	34.480	56.729	64.287	1.00
10	ATOM 25.19	2263	CG	ASN	464	35.902	57.252	64.087	1.00
	ATOM 27.59	2264	OD1	ASN	464	36.188	57.958	63.115	1.00
	ATOM 26.98	2265	ND2	ASN	464	36.778	56.955	65.040	1.00
15	ATOM 0.00	2266	HD21	ASN	464	36.514	56.437	65.809	1.00
	ATOM 0.00	2267	HD22	ASN	464	37.700	57.286	64.893	1.00
20	ATOM 18.39	2268	C	ASN	464	32.055	57.184	63.998	1.00
	ATOM 20.77	2269	O	ASN	464	31.927	56.007	63.639	1.00
	ATOM 16.37	2270	N	CYS	465	31.017	57.920	64.342	1.00
25	ATOM 0.00	2271	H	CYS	465	31.151	58.841	64.656	1.00
	ATOM 14.87	2272	CA	CYS	465	29.660	57.352	64.245	1.00
30	ATOM 14.20	2273	CB	CYS	465	28.795	58.006	65.308	1.00
	ATOM 12.65	2274	SG	CYS	465	27.051	57.500	65.248	1.00
	ATOM 12.49	2275	C	CYS	465	29.094	57.673	62.862	1.00
35	ATOM 12.65	2276	O	CYS	465	29.113	58.835	62.446	1.00
	ATOM 10.32	2277	N	PRO	466	28.636	56.667	62.104	1.00
40	ATOM 11.10	2278	CD	PRO	466	28.670	55.217	62.425	1.00
	ATOM 9.39	2279	CA	PRO	466	28.073	56.921	60.769	1.00
	ATOM 10.25	2280	CB	PRO	466	27.566	55.548	60.319	1.00
45	ATOM 11.42	2281	CG	PRO	466	28.404	54.572	61.124	1.00
	ATOM 7.58	2282	C	PRO	466	26.876	57.881	60.925	1.00
50	ATOM 7.26	2283	O	PRO	466	26.055	57.733	61.851	1.00
	ATOM 6.68	2284	N	GLU	467	26.727	58.807	59.975	1.00
	ATOM 0.00	2285	H	GLU	467	27.343	58.848	59.215	1.00
55	ATOM 6.04	2286	CA	GLU	467	25.652	59.781	60.100	1.00
	ATOM 5.93	2287	CB	GLU	467	25.895	60.930	59.126	1.00

	ATOM 7.61	2288	CG	GLU	467	24.827	62.033	59.276	1.00
	ATOM 7.58	2289	CD	GLU	467	24.949	62.858	60.537	1.00
5	ATOM 8.06	2290	OE1	GLU	467	25.929	62.714	61.289	1.00
	ATOM 7.05	2291	OE2	GLU	467	24.022	63.691	60.784	1.00
10	ATOM 5.22	2292	C	GLU	467	24.261	59.174	59.995	1.00
	ATOM 5.02	2293	O	GLU	467	23.327	59.674	60.653	1.00
	ATOM 2.00	2294	N	GLU	468	24.119	58.100	59.226	0.51
15	ATOM 0.00	2295	H	GLU	468	24.876	57.757	58.725	1.00
	ATOM 2.00	2296	CA	GLU	468	22.823	57.436	59.143	0.51
20	ATOM 2.00	2297	CB	GLU	468	22.889	56.272	58.182	0.51
	ATOM 2.53	2298	CG	GLU	468	23.077	56.743	56.747	0.51
	ATOM 6.33	2299	CD	GLU	468	23.460	55.601	55.829	0.51
25	ATOM 7.50	2300	OE1	GLU	468	22.553	55.026	55.176	0.51
	ATOM 8.25	2301	OE2	GLU	468	24.668	55.272	55.768	0.51
30	ATOM 2.00	2302	C	GLU	468	22.452	56.912	60.520	0.51
	ATOM 2.00	2303	O	GLU	468	21.306	56.997	60.953	0.51
	ATOM 4.24	2304	N	LEU	469	23.427	56.345	61.216	1.00
35	ATOM 0.00	2305	H	LEU	469	24.316	56.216	60.836	1.00
	ATOM 3.84	2306	CA	LEU	469	23.123	55.853	62.550	1.00
40	ATOM 5.93	2307	CB	LEU	469	24.277	54.993	63.132	1.00
	ATOM 7.66	2308	CG	LEU	469	23.972	54.287	64.459	1.00
	ATOM 8.35	2309	CD1	LEU	469	22.900	53.229	64.290	1.00
45	ATOM 10.08	2310	CD2	LEU	469	25.272	53.663	64.991	1.00
	ATOM 4.40	2311	C	LEU	469	22.788	57.015	63.497	1.00
50	ATOM 4.94	2312	O	LEU	469	21.912	56.929	64.358	1.00
	ATOM 4.82	2313	N	TYR	470	23.556	58.113	63.385	1.00
	ATOM 0.00	2314	H	TYR	470	24.279	58.161	62.740	1.00
55	ATOM 4.69	2315	CA	TYR	470	23.277	59.233	64.255	1.00
	ATOM 3.97	2316	CB	TYR	470	24.308	60.364	64.027	1.00



	ATOM	2317	CG	TYR	470	24.156	61.525	65.000	1.00
	3.57								
	ATOM	2318	CD1	TYR	470	24.403	61.380	66.367	1.00
	3.84								
5	ATOM	2319	CE1	TYR	470	24.266	62.422	67.261	1.00
	3.35								
	ATOM	2320	CD2	TYR	470	23.773	62.770	64.530	1.00
	5.04								
10	ATOM	2321	CE2	TYR	470	23.674	63.836	65.403	1.00
	4.10								
	ATOM	2322	CZ	TYR	470	23.904	63.667	66.753	1.00
	3.47								
	ATOM	2323	OH	TYR	470	23.784	64.737	67.628	1.00
	6.32								
15	ATOM	2324	HH	TYR	470	23.979	64.406	68.492	1.00
	0.00								
	ATOM	2325	C	TYR	470	21.862	59.774	64.035	1.00
	4.18								
	ATOM	2326	O	TYR	470	21.175	60.125	65.030	1.00
20	4.33								
	ATOM	2327	N	GLN	471	21.427	59.837	62.764	1.00
	4.39								
	ATOM	2328	H	GLN	471	22.002	59.548	62.038	1.00
	0.00								
25	ATOM	2329	CA	GLN	471	20.064	60.350	62.500	1.00
	4.56								
	ATOM	2330	CB	GLN	471	19.868	60.703	61.031	1.00
	5.08								
	ATOM	2331	CG	GLN	471	20.684	61.947	60.624	1.00
30	5.28								
	ATOM	2332	CD	GLN	471	20.329	63.136	61.492	1.00
	7.09								
	ATOM	2333	OE1	GLN	471	19.153	63.352	61.824	1.00
	8.12								
35	ATOM	2334	NE2	GLN	471	21.326	63.940	61.856	1.00
	6.37								
	ATOM	2335	HE21	GLN	471	22.236	63.743	61.584	1.00
	0.00								
	ATOM	2336	HE22	GLN	471	21.094	64.701	62.429	1.00
40	0.00								
	ATOM	2337	C	GLN	471	18.995	59.350	63.008	1.00
	4.46								
	ATOM	2338	O	GLN	471	17.929	59.765	63.467	1.00
	6.58								
45	ATOM	2339	N	LEU	472	19.363	58.068	63.149	1.00
	5.67								
	ATOM	2340	H	LEU	472	20.238	57.765	62.845	1.00
	0.00								
	ATOM	2341	CA	LEU	472	18.422	57.112	63.733	1.00
50	5.59								
	ATOM	2342	CB	LEU	472	18.847	55.677	63.423	1.00
	5.95								
	ATOM	2343	CG	LEU	472	17.776	54.626	63.714	1.00
	6.17								
55	ATOM	2344	CD1	LEU	472	16.699	54.732	62.640	1.00
	8.40								
	ATOM	2345	CD2	LEU	472	18.425	53.239	63.565	1.00
	7.32								

	ATOM 6.10	2346	C	LEU	472	18.308	57.355	65.255	1.00
	ATOM 6.53	2347	O	LEU	472	17.237	57.324	65.846	1.00
5	ATOM 5.16	2348	N	MET	473	19.454	57.647	65.908	1.00
	ATOM 0.00	2349	H	MET	473	20.292	57.622	65.404	1.00
10	ATOM 5.13	2350	CA	MET	473	19.473	57.983	67.329	1.00
	ATOM 5.60	2351	CB	MET	473	20.885	58.393	67.728	1.00
	ATOM 5.38	2352	CG	MET	473	21.865	57.162	67.626	1.00
15	ATOM 6.95	2353	SD	MET	473	23.566	57.901	67.861	1.00
	ATOM 7.19	2354	CE	MET	473	24.589	56.334	67.713	1.00
20	ATOM 5.07	2355	C	MET	473	18.596	59.224	67.515	1.00
	ATOM 6.08	2356	O	MET	473	17.830	59.288	68.461	1.00
	ATOM 5.56	2357	N	ARG	474	18.714	60.186	66.610	1.00
25	ATOM 0.00	2358	H	ARG	474	19.307	60.071	65.829	1.00
	ATOM 5.66	2359	CA	ARG	474	17.907	61.417	66.799	1.00
30	ATOM 6.55	2360	CB	ARG	474	18.252	62.482	65.731	1.00
	ATOM 8.15	2361	CG	ARG	474	19.756	62.944	65.715	1.00
	ATOM 11.29	2362	CD	ARG	474	20.197	63.546	66.969	1.00
35	ATOM 13.35	2363	NE	ARG	474	19.469	64.769	67.278	1.00
	ATOM 0.00	2364	HE	ARG	474	18.501	64.719	67.298	1.00
40	ATOM 12.24	2365	CZ	ARG	474	20.030	65.955	67.498	1.00
	ATOM 8.11	2366	NH1	ARG	474	21.344	66.132	67.458	1.00
	ATOM 0.00	2367	HH11	ARG	474	21.955	65.352	67.277	1.00
45	ATOM 0.00	2368	HH12	ARG	474	21.745	67.030	67.635	1.00
	ATOM 12.65	2369	NH2	ARG	474	19.228	66.976	67.757	1.00
50	ATOM 0.00	2370	HH21	ARG	474	18.246	66.849	67.753	1.00
	ATOM 0.00	2371	HH22	ARG	474	19.620	67.890	67.906	1.00
	ATOM 5.28	2372	C	ARG	474	16.414	61.120	66.772	1.00
55	ATOM 7.28	2373	O	ARG	474	15.660	61.789	67.458	1.00
	ATOM 6.18	2374	N	LEU	475	15.973	60.176	65.937	1.00

	ATOM	2375	H	LEU	475	16.599	59.687	65.358	1.00
	0.00								
	ATOM	2376	CA	LEU	475	14.535	59.833	65.918	1.00
	5.65								
5	ATOM	2377	CB	LEU	475	14.200	58.769	64.881	1.00
	6.32								
	ATOM	2378	CG	LEU	475	14.438	59.049	63.423	1.00
	8.27								
	ATOM	2379	CD1	LEU	475	13.828	57.856	62.657	1.00
10	10.34								
	ATOM	2380	CD2	LEU	475	13.761	60.340	63.023	1.00
	10.06								
	ATOM	2381	C	LEU	475	14.119	59.292	67.288	1.00
	5.61								
15	ATOM	2382	O	LEU	475	13.021	59.578	67.798	1.00
	6.38								
	ATOM	2383	N	CYS	476	15.010	58.527	67.943	1.00
	5.04								
	ATOM	2384	H	CYS	476	15.872	58.323	67.538	1.00
20	0.00								
	ATOM	2385	CA	CYS	476	14.713	58.010	69.254	1.00
	5.25								
	ATOM	2386	CB	CYS	476	15.827	57.034	69.670	1.00
	4.89								
25	ATOM	2387	SG	CYS	476	15.962	55.582	68.654	1.00
	6.23								
	ATOM	2388	C	CYS	476	14.630	59.049	70.342	1.00
	4.66								
	ATOM	2389	O	CYS	476	14.104	58.817	71.416	1.00
30	5.91								
	ATOM	2390	N	TRP	477	15.206	60.242	70.047	1.00
	5.78								
	ATOM	2391	H	TRP	477	15.588	60.396	69.164	1.00
	0.00								
35	ATOM	2392	CA	TRP	477	15.261	61.296	71.025	1.00
	5.87								
	ATOM	2393	CB	TRP	477	16.698	61.833	71.190	1.00
	5.33								
	ATOM	2394	CG	TRP	477	17.736	60.770	71.568	1.00
40	4.82								
	ATOM	2395	CD2	TRP	477	19.102	60.778	71.165	1.00
	3.86								
	ATOM	2396	CE2	TRP	477	19.728	59.628	71.752	1.00
	5.21								
45	ATOM	2397	CE3	TRP	477	19.871	61.642	70.361	1.00
	4.16								
	ATOM	2398	CD1	TRP	477	17.567	59.667	72.375	1.00
	6.46								
	ATOM	2399	NE1	TRP	477	18.785	58.969	72.482	1.00
50	4.91								
	ATOM	2400	HE1	TRP	477	18.921	58.155	72.996	1.00
	0.00								
	ATOM	2401	CZ2	TRP	477	21.074	59.336	71.537	1.00
	5.82								
55	ATOM	2402	CZ3	TRP	477	21.208	61.341	70.157	1.00
	4.59								
	ATOM	2403	CH2	TRP	477	21.786	60.209	70.741	1.00
	4.52								

	ATOM 7.18	2404	C	TRP	477	14.331	62.432	70.728	1.00
	ATOM 7.39	2405	O	TRP	477	14.519	63.536	71.231	1.00
5	ATOM 6.00	2406	N	LYS	478	13.291	62.161	69.961	1.00
	ATOM 0.00	2407	H	LYS	478	13.180	61.274	69.565	1.00
10	ATOM 7.56	2408	CA	LYS	478	12.319	63.219	69.699	1.00
	ATOM 8.32	2409	CB	LYS	478	11.293	62.731	68.679	1.00
	ATOM 11.04	2410	CG	LYS	478	11.869	62.775	67.273	1.00
15	ATOM 14.78	2411	CD	LYS	478	10.927	62.299	66.234	1.00
	ATOM 18.29	2412	CE	LYS	478	11.498	62.526	64.861	1.00
20	ATOM 22.77	2413	NZ	LYS	478	11.628	63.969	64.509	1.00
	ATOM 0.00	2414	HZ1	LYS	478	12.253	64.432	65.196	1.00
	ATOM 0.00	2415	HZ2	LYS	478	10.681	64.413	64.558	1.00
25	ATOM 0.00	2416	HZ3	LYS	478	12.006	64.064	63.555	1.00
	ATOM 7.86	2417	C	LYS	478	11.656	63.610	71.016	1.00
30	ATOM 8.45	2418	O	LYS	478	11.472	62.794	71.946	1.00
	ATOM 9.37	2419	N	GLU	479	11.250	64.887	71.091	1.00
	ATOM 0.00	2420	H	GLU	479	11.344	65.484	70.316	1.00
35	ATOM 10.56	2421	CA	GLU	479	10.683	65.403	72.316	1.00
	ATOM 14.56	2422	CB	GLU	479	10.367	66.888	72.128	1.00
40	ATOM 18.93	2423	CG	GLU	479	9.793	67.492	73.360	1.00
	ATOM 22.09	2424	CD	GLU	479	10.841	67.919	74.321	1.00
	ATOM 23.23	2425	OE1	GLU	479	12.025	67.617	74.055	1.00
45	ATOM 23.63	2426	OE2	GLU	479	10.513	68.633	75.277	1.00
	ATOM 9.17	2427	C	GLU	479	9.395	64.709	72.746	1.00
50	ATOM 10.60	2428	O	GLU	479	9.262	64.285	73.901	1.00
	ATOM 9.87	2429	N	ARG	480	8.468	64.584	71.810	1.00
	ATOM 0.00	2430	H	ARG	480	8.630	64.905	70.894	1.00
55	ATOM 10.88	2431	CA	ARG	480	7.183	63.956	72.149	1.00
	ATOM 12.98	2432	CB	ARG	480	6.074	64.402	71.184	1.00

	ATOM	2433	CG	ARG	480	5.722	65.877	71.254	1.00
	17.39								
	ATOM	2434	CD	ARG	480	4.329	66.122	70.639	1.00
	20.06								
5	ATOM	2435	NE	ARG	480	4.354	65.998	69.186	1.00
	24.35								
	ATOM	2436	HE	ARG	480	5.190	66.232	68.740	1.00
	0.00								
	ATOM	2437	CZ	ARG	480	3.316	65.616	68.436	1.00
10	24.98								
	ATOM	2438	NH1	ARG	480	2.159	65.308	69.002	1.00
	28.47								
	ATOM	2439	HH11	ARG	480	2.071	65.319	69.990	1.00
	0.00								
15	ATOM	2440	HH12	ARG	480	1.396	65.000	68.429	1.00
	0.00								
	ATOM	2441	NH2	ARG	480	3.427	65.577	67.109	1.00
	27.22								
	ATOM	2442	HH21	ARG	480	4.294	65.855	66.672	1.00
20	0.00								
	ATOM	2443	HH22	ARG	480	2.657	65.305	66.549	1.00
	0.00								
	ATOM	2444	C	ARG	480	7.347	62.458	72.013	1.00
	9.30								
25	ATOM	2445	O	ARG	480	7.697	62.010	70.935	1.00
	10.00								
	ATOM	2446	N	PRO	481	7.033	61.699	73.085	1.00
	9.78								
	ATOM	2447	CD	PRO	481	6.681	62.127	74.445	1.00
30	9.93								
	ATOM	2448	CA	PRO	481	7.161	60.240	73.019	1.00
	9.85								
	ATOM	2449	CB	PRO	481	6.537	59.798	74.332	1.00
	9.97								
35	ATOM	2450	CG	PRO	481	6.910	60.886	75.309	1.00
	11.62								
	ATOM	2451	C	PRO	481	6.450	59.638	71.819	1.00
	10.02								
	ATOM	2452	O	PRO	481	7.016	58.825	71.071	1.00
40	10.13								
	ATOM	2453	N	GLU	482	5.238	60.133	71.512	1.00
	10.63								
	ATOM	2454	H	GLU	482	4.858	60.861	72.027	1.00
	0.00								
45	ATOM	2455	CA	GLU	482	4.530	59.558	70.391	1.00
	12.13								
	ATOM	2456	CB	GLU	482	3.077	60.045	70.404	1.00
	14.96								
	ATOM	2457	CG	GLU	482	2.985	61.559	70.151	1.00
50	19.14								
	ATOM	2458	CD	GLU	482	2.948	62.440	71.417	1.00
	21.01								
	ATOM	2459	OE1	GLU	482	3.424	62.066	72.556	1.00
	19.96								
55	ATOM	2460	OE2	GLU	482	2.392	63.564	71.233	1.00
	24.17								
	ATOM	2461	C	GLU	482	5.175	59.758	69.003	1.00
	10.16								

	ATOM 11.74	2462	O	GLU	482	4.799	59.108	68.013	1.00
	ATOM 9.21	2463	N	ASP	483	6.164	60.663	68.908	1.00
5	ATOM 0.00	2464	H	ASP	483	6.436	61.169	69.691	1.00
	ATOM 8.77	2465	CA	ASP	483	6.832	60.905	67.639	1.00
10	ATOM 10.30	2466	CB	ASP	483	7.347	62.347	67.567	1.00
	ATOM 15.55	2467	CG	ASP	483	6.213	63.361	67.401	1.00
	ATOM 16.29	2468	OD1	ASP	483	5.094	62.959	66.996	1.00
15	ATOM 15.87	2469	OD2	ASP	483	6.475	64.534	67.686	1.00
	ATOM 7.47	2470	C	ASP	483	8.040	59.997	67.451	1.00
20	ATOM 9.55	2471	O	ASP	483	8.606	59.932	66.358	1.00
	ATOM 7.27	2472	N	ARG	484	8.425	59.305	68.515	1.00
	ATOM 0.00	2473	H	ARG	484	7.950	59.432	69.358	1.00
25	ATOM 6.37	2474	CA	ARG	484	9.563	58.371	68.435	1.00
	ATOM 5.61	2475	CB	ARG	484	10.038	58.016	69.835	1.00
30	ATOM 4.50	2476	CG	ARG	484	10.575	59.269	70.629	1.00
	ATOM 5.79	2477	CD	ARG	484	10.822	58.932	72.045	1.00
	ATOM 5.54	2478	NE	ARG	484	10.947	60.178	72.835	1.00
35	ATOM 0.00	2479	HE	ARG	484	11.163	60.995	72.370	1.00
	ATOM 5.68	2480	CZ	ARG	484	10.745	60.237	74.143	1.00
40	ATOM 6.19	2481	NH1	ARG	484	10.435	59.130	74.890	1.00
	ATOM 0.00	2482	HH11	ARG	484	10.371	58.237	74.458	1.00
	ATOM 0.00	2483	HH12	ARG	484	10.304	59.233	75.870	1.00
45	ATOM 7.29	2484	NH2	ARG	484	10.650	61.435	74.772	1.00
	ATOM 0.00	2485	HH21	ARG	484	10.726	62.276	74.240	1.00
50	ATOM 0.00	2486	HH22	ARG	484	10.493	61.474	75.752	1.00
	ATOM 7.83	2487	C	ARG	484	9.104	57.124	67.686	1.00
	ATOM 8.21	2488	O	ARG	484	7.936	56.779	67.773	1.00
55	ATOM 6.56	2489	N	PRO	485	10.004	56.458	66.979	1.00
	ATOM 6.14	2490	CD	PRO	485	11.455	56.804	66.892	1.00

	ATOM 6.48	2491	CA	PRO	485	9.683	55.261	66.200	1.00
	ATOM 6.21	2492	CB	PRO	485	10.958	55.027	65.380	1.00
5	ATOM 7.95	2493	CG	PRO	485	12.025	55.560	66.251	1.00
	ATOM 5.48	2494	C	PRO	485	9.340	54.053	67.049	1.00
10	ATOM 6.38	2495	O	PRO	485	9.614	53.999	68.235	1.00
	ATOM 6.76	2496	N	THR	486	8.778	53.043	66.388	1.00
	ATOM 0.00	2497	H	THR	486	8.538	53.159	65.454	1.00
15	ATOM 6.58	2498	CA	THR	486	8.559	51.775	67.079	1.00
	ATOM 6.34	2499	CB	THR	486	7.460	50.938	66.370	1.00
20	ATOM 7.89	2500	OG1	THR	486	7.845	50.658	65.023	1.00
	ATOM 0.00	2501	HG1	THR	486	7.170	50.128	64.615	1.00
	ATOM 8.28	2502	CG2	THR	486	6.101	51.770	66.358	1.00
25	ATOM 6.42	2503	C	THR	486	9.829	50.953	66.980	1.00
	ATOM 6.53	2504	O	THR	486	10.691	51.202	66.128	1.00
30	ATOM 5.71	2505	N	PHE	487	9.930	49.972	67.874	1.00
	ATOM 0.00	2506	H	PHE	487	9.256	49.869	68.553	1.00
	ATOM 5.66	2507	CA	PHE	487	11.060	49.050	67.789	1.00
35	ATOM 4.55	2508	CB	PHE	487	11.128	48.163	69.039	1.00
	ATOM 3.64	2509	CG	PHE	487	11.765	48.852	70.218	1.00
40	ATOM 4.58	2510	CD1	PHE	487	13.134	49.166	70.178	1.00
	ATOM 3.94	2511	CD2	PHE	487	11.025	49.199	71.350	1.00
	ATOM 4.13	2512	CE1	PHE	487	13.733	49.807	71.249	1.00
45	ATOM 5.88	2513	CE2	PHE	487	11.600	49.828	72.408	1.00
	ATOM 4.40	2514	CZ	PHE	487	12.994	50.142	72.366	1.00
50	ATOM 6.80	2515	C	PHE	487	11.024	48.228	66.506	1.00
	ATOM 6.89	2516	O	PHE	487	12.080	47.846	65.983	1.00
	ATOM 7.35	2517	N	ASP	488	9.826	47.889	65.997	1.00
55	ATOM 0.00	2518	H	ASP	488	8.984	48.104	66.451	1.00
	ATOM 9.30	2519	CA	ASP	488	9.836	47.177	64.727	1.00

	ATOM 13.59	2520	CB	ASP	488	8.457	46.691	64.300	1.00
	ATOM 18.00	2521	CG	ASP	488	8.569	45.639	63.185	1.00
5	ATOM 20.71	2522	OD1	ASP	488	9.061	44.531	63.478	1.00
	ATOM 23.96	2523	OD2	ASP	488	8.328	45.959	62.005	1.00
10	ATOM 7.89	2524	C	ASP	488	10.447	48.019	63.607	1.00
	ATOM 8.16	2525	O	ASP	488	11.202	47.492	62.801	1.00
	ATOM 6.57	2526	N	TYR	489	10.154	49.338	63.599	1.00
15	ATOM 0.00	2527	H	TYR	489	9.501	49.680	64.240	1.00
	ATOM 6.51	2528	CA	TYR	489	10.753	50.238	62.630	1.00
20	ATOM 5.83	2529	CB	TYR	489	10.198	51.661	62.797	1.00
	ATOM 7.48	2530	CG	TYR	489	10.831	52.678	61.888	1.00
	ATOM 8.56	2531	CD1	TYR	489	10.412	52.820	60.575	1.00
25	ATOM 10.01	2532	CE1	TYR	489	11.020	53.729	59.724	1.00
	ATOM 6.56	2533	CD2	TYR	489	11.898	53.460	62.347	1.00
30	ATOM 7.31	2534	CE2	TYR	489	12.525	54.343	61.495	1.00
	ATOM 9.98	2535	CZ	TYR	489	12.076	54.476	60.202	1.00
	ATOM 11.46	2536	OH	TYR	489	12.677	55.392	59.366	1.00
35	ATOM 0.00	2537	HH	TYR	489	13.355	55.856	59.850	1.00
	ATOM 5.92	2538	C	TYR	489	12.267	50.272	62.801	1.00
40	ATOM 7.10	2539	O	TYR	489	12.995	50.092	61.839	1.00
	ATOM 6.65	2540	N	LEU	490	12.718	50.436	64.038	1.00
	ATOM 0.00	2541	H	LEU	490	12.092	50.501	64.777	1.00
45	ATOM 6.42	2542	CA	LEU	490	14.165	50.492	64.347	1.00
	ATOM 5.79	2543	CB	LEU	490	14.388	50.731	65.870	1.00
50	ATOM 7.48	2544	CG	LEU	490	13.989	52.132	66.373	1.00
	ATOM 6.61	2545	CD1	LEU	490	13.931	52.235	67.878	1.00
	ATOM 8.80	2546	CD2	LEU	490	15.056	53.105	65.797	1.00
55	ATOM 6.18	2547	C	LEU	490	14.860	49.211	63.880	1.00
	ATOM 5.96	2548	O	LEU	490	15.892	49.243	63.238	1.00



	ATOM 6.27	2549	N	ARG	491	14.233	48.060	64.160	1.00
	ATOM 0.00	2550	H	ARG	491	13.411	48.069	64.673	1.00
5	ATOM 6.31	2551	CA	ARG	491	14.815	46.795	63.721	1.00
	ATOM 7.38	2552	CB	ARG	491	13.915	45.641	64.183	1.00
10	ATOM 9.31	2553	CG	ARG	491	14.470	44.283	63.688	1.00
	ATOM 14.23	2554	CD	ARG	491	13.393	43.170	63.645	1.00
	ATOM 15.07	2555	NE	ARG	491	12.172	43.598	62.930	1.00
15	ATOM 0.00	2556	HE	ARG	491	11.401	43.829	63.489	1.00
	ATOM 15.75	2557	CZ	ARG	491	12.018	43.712	61.608	1.00
20	ATOM 15.02	2558	NH1	ARG	491	12.982	43.434	60.746	1.00
	ATOM 0.00	2559	HH11	ARG	491	13.880	43.121	61.087	1.00
	ATOM 0.00	2560	HH12	ARG	491	12.829	43.535	59.774	1.00
25	ATOM 15.21	2561	NH2	ARG	491	10.865	44.169	61.137	1.00
	ATOM 0.00	2562	HH21	ARG	491	10.135	44.416	61.771	1.00
30	ATOM 0.00	2563	HH22	ARG	491	10.729	44.265	60.152	1.00
	ATOM 6.75	2564	C	ARG	491	14.932	46.739	62.189	1.00
	ATOM 7.35	2565	O	ARG	491	15.992	46.361	61.634	1.00
35	ATOM 4.54	2566	N	SER	492	13.879	47.186	61.492	0.71
	ATOM 0.00	2567	H	SER	492	13.089	47.538	61.958	1.00
40	ATOM 5.30	2568	CA	SER	492	13.880	47.133	60.055	0.71
	ATOM 5.43	2569	CB	SER	492	12.496	47.529	59.526	0.71
	ATOM 9.15	2570	OG	SER	492	12.474	47.374	58.129	0.71
45	ATOM 0.00	2571	HG	SER	492	13.145	47.949	57.762	1.00
	ATOM 4.32	2572	C	SER	492	14.962	48.008	59.439	0.71
50	ATOM 4.97	2573	O	SER	492	15.671	47.594	58.533	0.71
	ATOM 5.16	2574	N	VAL	493	15.139	49.218	59.983	1.00
	ATOM 0.00	2575	H	VAL	493	14.553	49.500	60.718	1.00
55	ATOM 6.43	2576	CA	VAL	493	16.138	50.119	59.443	1.00
	ATOM 5.63	2577	CB	VAL	493	15.980	51.550	60.107	1.00

	ATOM 8.00	2578	CG1	VAL	493	17.159	52.455	59.652	1.00
	ATOM 7.88	2579	CG2	VAL	493	14.634	52.189	59.690	1.00
5	ATOM 5.20	2580	C	VAL	493	17.516	49.591	59.737	1.00
	ATOM 6.67	2581	O	VAL	493	18.353	49.604	58.870	1.00
10	ATOM 5.50	2582	N	LEU	494	17.745	49.116	60.958	1.00
	ATOM 0.00	2583	H	LEU	494	17.027	49.146	61.624	1.00
	ATOM 6.34	2584	CA	LEU	494	19.094	48.609	61.333	1.00
15	ATOM 6.35	2585	CB	LEU	494	19.145	48.289	62.805	1.00
	ATOM 5.07	2586	CG	LEU	494	19.171	49.514	63.713	1.00
20	ATOM 5.78	2587	CD1	LEU	494	18.777	49.188	65.130	1.00
	ATOM 6.58	2588	CD2	LEU	494	20.588	50.169	63.619	1.00
	ATOM 7.76	2589	C	LEU	494	19.489	47.393	60.482	1.00
25	ATOM 8.54	2590	O	LEU	494	20.648	47.259	60.094	1.00
	ATOM 8.30	2591	N	GLU	495	18.498	46.580	60.118	1.00
30	ATOM 0.00	2592	H	GLU	495	17.585	46.751	60.430	1.00
	ATOM 9.37	2593	CA	GLU	495	18.765	45.453	59.230	1.00
	ATOM 10.30	2594	CB	GLU	495	17.566	44.502	59.139	1.00
35	ATOM 12.04	2595	CG	GLU	495	17.360	43.687	60.404	1.00
	ATOM 14.75	2596	CD	GLU	495	16.133	42.795	60.346	1.00
40	ATOM 17.48	2597	OE1	GLU	495	15.393	42.812	59.331	1.00
	ATOM 15.95	2598	OE2	GLU	495	15.858	42.105	61.362	1.00
	ATOM 9.75	2599	C	GLU	495	19.195	45.944	57.850	1.00
45	ATOM 9.88	2600	O	GLU	495	20.099	45.395	57.222	1.00
	ATOM 8.31	2601	N	ASP	496	18.574	47.016	57.385	1.00
50	ATOM 0.00	2602	H	ASP	496	17.904	47.484	57.931	1.00
	ATOM 9.40	2603	CA	ASP	496	18.930	47.551	56.084	1.00
	ATOM 9.92	2604	CB	ASP	496	17.905	48.638	55.683	1.00
55	ATOM 10.66	2605	CG	ASP	496	16.622	48.068	55.109	1.00
	ATOM 13.65	2606	OD1	ASP	496	16.577	46.842	54.781	1.00

	ATOM 10.73	2607	OD2	ASP	496	15.618	48.817	54.976	1.00
	ATOM 9.26	2608	C	ASP	496	20.344	48.131	56.130	1.00
5	ATOM 10.67	2609	O	ASP	496	21.085	48.049	55.169	1.00
	ATOM 9.18	2610	N	PHE	497	20.684	48.787	57.241	1.00
10	ATOM 0.00	2611	H	PHE	497	20.045	48.836	57.979	1.00
	ATOM 10.38	2612	CA	PHE	497	22.009	49.385	57.410	1.00
	ATOM 9.42	2613	CB	PHE	497	22.103	50.110	58.765	1.00
15	ATOM 9.62	2614	CG	PHE	497	21.388	51.443	58.822	1.00
	ATOM 9.72	2615	CD1	PHE	497	20.736	51.943	57.722	1.00
20	ATOM 9.12	2616	CD2	PHE	497	21.414	52.185	60.015	1.00
	ATOM 9.37	2617	CE1	PHE	497	20.102	53.192	57.800	1.00
	ATOM 8.46	2618	CE2	PHE	497	20.799	53.432	60.132	1.00
25	ATOM 7.24	2619	CZ	PHE	497	20.137	53.935	58.995	1.00
	ATOM 11.52	2620	C	PHE	497	23.081	48.271	57.381	1.00
30	ATOM 12.93	2621	O	PHE	497	24.158	48.438	56.804	1.00
	ATOM 14.28	2622	N	PHE	498	22.761	47.153	58.025	1.00
	ATOM 0.00	2623	H	PHE	498	21.890	47.107	58.477	1.00
35	ATOM 16.98	2624	CA	PHE	498	23.660	45.986	58.086	1.00
	ATOM 19.14	2625	CB	PHE	498	23.132	45.014	59.176	1.00
40	ATOM 20.38	2626	CG	PHE	498	23.659	43.596	59.107	1.00
	ATOM 22.05	2627	CD1	PHE	498	25.010	43.329	59.124	1.00
	ATOM 22.64	2628	CD2	PHE	498	22.758	42.525	59.125	1.00
45	ATOM 21.12	2629	CE1	PHE	498	25.475	42.012	59.165	1.00
	ATOM 22.55	2630	CE2	PHE	498	23.202	41.203	59.168	1.00
50	ATOM 22.00	2631	CZ	PHE	498	24.576	40.954	59.188	1.00
	ATOM 18.13	2632	C	PHE	498	23.797	45.295	56.746	1.00
	ATOM 18.94	2633	O	PHE	498	24.917	45.034	56.300	1.00
55	ATOM 20.19	2634	N	THR	499	22.687	45.073	56.055	1.00
	ATOM 0.00	2635	H	THR	499	21.829	45.405	56.384	1.00

5	22.43	ATOM	2636	CA	THR	499	22.758	44.343	54.797	1.00
	22.60	ATOM	2637	CB	THR	499	21.399	43.789	54.373	1.00
	23.78	ATOM	2638	OG1	THR	499	20.485	44.855	54.253	1.00
	0.00	ATOM	2639	HG1	THR	499	20.379	45.296	55.099	1.00
10	22.61	ATOM	2640	CG2	THR	499	20.849	42.789	55.405	1.00
	23.72	ATOM	2641	C	THR	499	23.419	45.195	53.736	1.00
	25.02	ATOM	2642	O	THR	499	23.897	44.682	52.719	1.00
15	24.94	ATOM	2643	N	ALA	500	23.489	46.497	54.006	1.00
	0.00	ATOM	2644	H	ALA	500	23.078	46.836	54.824	1.00
	26.58	ATOM	2645	CA	ALA	500	24.153	47.432	53.125	1.00
20	25.49	ATOM	2646	CB	ALA	500	23.642	48.830	53.346	1.00
	27.54	ATOM	2647	C	ALA	500	25.652	47.382	53.407	1.00
	28.68	ATOM	2648	O	ALA	500	26.428	47.114	52.491	1.00
25	27.16	ATOM	2649	N	THR	501	26.050	47.596	54.669	1.00
	0.00	ATOM	2650	H	THR	501	25.364	47.778	55.345	1.00
	26.85	ATOM	2651	CA	THR	501	27.474	47.577	55.072	1.00
	26.23	ATOM	2652	CB	THR	501	27.687	48.037	56.555	1.00
35	26.89	ATOM	2653	OG1	THR	501	26.993	47.162	57.454	1.00
	0.00	ATOM	2654	HG1	THR	501	26.037	47.169	57.270	1.00
	25.38	ATOM	2655	CG2	THR	501	27.224	49.498	56.773	1.00
40	26.89	ATOM	2656	C	THR	501	28.144	46.196	54.904	1.00
	27.80	ATOM	2657	O	THR	501	27.647	45.353	54.112	1.00
	28.37	ATOM	2658	OT	THR	501	29.172	45.942	55.594	1.00
45	8.52	ATOM	2659	OH2	TIP3	1	21.620	29.748	74.825	1.00
	0.00	ATOM	2660	H1	TIP3	1	21.619	30.703	74.839	1.00
	0.00	ATOM	2661	H2	TIP3	1	21.616	29.512	73.905	1.00
	8.93	ATOM	2662	OH2	TIP3	2	19.448	27.888	78.810	1.00
55	0.00	ATOM	2663	H1	TIP3	2	19.438	28.841	78.818	1.00
	0.00	ATOM	2664	H2	TIP3	2	19.446	27.649	77.893	1.00

	ATOM	2665	OH2	TIP3	3	14.802	51.739	79.298	1.00
	7.18								
	ATOM	2666	H1	TIP3	3	14.787	52.706	79.289	1.00
	0.00								
5	ATOM	2667	H2	TIP3	3	14.787	51.512	78.362	1.00
	0.00								
	ATOM	2668	OH2	TIP3	4	19.440	60.726	77.700	1.00
	6.25								
10	ATOM	2669	H1	TIP3	4	19.463	61.675	77.720	1.00
	0.00								
	ATOM	2670	H2	TIP3	4	19.463	60.476	76.790	1.00
	0.00								
	ATOM	2671	OH2	TIP3	5	20.579	62.826	73.348	1.00
	6.02								
15	ATOM	2672	H1	TIP3	5	20.582	63.772	73.343	1.00
	0.00								
	ATOM	2673	H2	TIP3	5	20.584	62.575	72.424	1.00
	0.00								
	ATOM	2674	OH2	TIP3	6	16.627	32.849	74.682	1.00
20	6.62								
	ATOM	2675	H1	TIP3	6	16.613	33.808	74.673	1.00
	0.00								
	ATOM	2676	H2	TIP3	6	16.613	32.606	73.751	1.00
	0.00								
25	ATOM	2677	OH2	TIP3	7	24.567	68.831	70.758	1.00
	11.18								
	ATOM	2678	H1	TIP3	7	24.591	69.792	70.745	1.00
	0.00								
	ATOM	2679	H2	TIP3	7	24.591	68.599	69.825	1.00
30	0.00								
	ATOM	2680	OH2	TIP3	8	3.910	16.814	94.936	1.00
	8.70								
	ATOM	2681	H1	TIP3	8	3.914	17.769	94.934	1.00
	0.00								
35	ATOM	2682	H2	TIP3	8	3.914	16.574	94.006	1.00
	0.00								
	ATOM	2683	OH2	TIP3	9	18.100	61.850	79.778	1.00
	10.32								
	ATOM	2684	H1	TIP3	9	18.102	62.807	79.772	1.00
40	0.00								
	ATOM	2685	H2	TIP3	9	18.102	61.605	78.848	1.00
	0.00								
	ATOM	2686	OH2	TIP3	10	16.772	62.110	62.500	1.00
	12.69								
45	ATOM	2687	H1	TIP3	10	16.756	63.066	62.499	1.00
	0.00								
	ATOM	2688	H2	TIP3	10	16.749	61.901	61.567	1.00
	0.00								
	ATOM	2689	OH2	TIP3	11	25.240	50.449	80.104	1.00
50	7.27								
	ATOM	2690	H1	TIP3	11	25.255	51.408	80.086	1.00
	0.00								
	ATOM	2691	H2	TIP3	11	25.254	50.208	79.167	1.00
	0.00								
55	ATOM	2692	OH2	TIP3	12	26.659	31.622	75.084	1.00
	8.62								
	ATOM	2693	H1	TIP3	12	26.656	32.587	75.083	1.00
	0.00								

	ATOM 0.00	2694	H2	TIP3	12	26.656	31.396	74.154	1.00
	ATOM 9.37	2695	OH2	TIP3	13	25.383	21.709	76.987	1.00
5	ATOM 0.00	2696	H1	TIP3	13	25.381	22.678	76.989	1.00
	ATOM 0.00	2697	H2	TIP3	13	25.381	21.489	76.055	1.00
10	ATOM 16.31	2698	OH2	TIP3	14	3.800	51.757	76.179	1.00
	ATOM 0.00	2699	H1	TIP3	14	3.790	52.707	76.172	1.00
	ATOM 0.00	2700	H2	TIP3	14	3.790	51.508	75.250	1.00
15	ATOM 15.59	2701	OH2	TIP3	15	33.014	39.952	77.627	1.00
	ATOM 0.00	2702	H1	TIP3	15	33.021	40.918	77.633	1.00
	ATOM 0.00	2703	H2	TIP3	15	33.021	39.720	76.707	1.00
20	ATOM 9.49	2704	OH2	TIP3	16	23.244	20.494	78.039	1.00
	ATOM 0.00	2705	H1	TIP3	16	23.242	21.447	78.032	1.00
25	ATOM 0.00	2706	H2	TIP3	16	23.242	20.250	77.107	1.00
	ATOM 12.47	2707	OH2	TIP3	17	7.671	53.984	63.752	1.00
30	ATOM 0.00	2708	H1	TIP3	17	7.669	54.938	63.759	1.00
	ATOM 0.00	2709	H2	TIP3	17	7.669	53.747	62.829	1.00
	ATOM 10.19	2710	OH2	TIP3	18	28.174	56.185	74.630	1.00
35	ATOM 0.00	2711	H1	TIP3	18	28.170	57.156	74.603	1.00
	ATOM 0.00	2712	H2	TIP3	18	28.170	55.960	73.685	1.00
40	ATOM 9.68	2713	OH2	TIP3	19	22.146	18.808	82.244	1.00
	ATOM 0.00	2714	H1	TIP3	19	22.146	19.771	82.246	1.00
	ATOM 0.00	2715	H2	TIP3	19	22.148	18.581	81.320	1.00
45	ATOM 9.25	2716	OH2	TIP3	20	13.274	34.172	76.713	1.00
	ATOM 0.00	2717	H1	TIP3	20	13.268	35.135	76.706	1.00
50	ATOM 0.00	2718	H2	TIP3	20	13.268	33.939	75.780	1.00
	ATOM 13.95	2719	OH2	TIP3	21	7.239	57.436	104.519	1.00
	ATOM 0.00	2720	H1	TIP3	21	7.217	58.400	104.524	1.00
55	ATOM 0.00	2721	H2	TIP3	21	7.217	57.205	103.595	1.00
	ATOM 19.75	2722	OH2	TIP3	22	35.743	44.113	79.494	1.00

	ATOM 0.00	2723	H1	TIP3	22	35.762	45.067	79.489	1.00
	ATOM 0.00	2724	H2	TIP3	22	35.762	43.865	78.562	1.00
5	ATOM 14.66	2725	OH2	TIP3	23	8.606	65.639	69.086	1.00
	ATOM 0.00	2726	H1	TIP3	23	8.604	66.584	69.083	1.00
10	ATOM 0.00	2727	H2	TIP3	23	8.604	65.377	68.158	1.00
	ATOM 12.39	2728	OH2	TIP3	24	22.220	28.061	79.375	1.00
	ATOM 0.00	2729	H1	TIP3	24	22.229	29.002	79.345	1.00
15	ATOM 0.00	2730	H2	TIP3	24	22.240	27.824	78.438	1.00
	ATOM 17.10	2731	OH2	TIP3	25	14.088	69.122	73.924	1.00
20	ATOM 0.00	2732	H1	TIP3	25	14.085	70.074	73.909	1.00
	ATOM 0.00	2733	H2	TIP3	25	14.085	68.881	72.986	1.00
	ATOM 10.12	2734	OH2	TIP3	26	13.661	55.614	79.562	1.00
25	ATOM 0.00	2735	H1	TIP3	26	13.655	56.564	79.554	1.00
	ATOM 0.00	2736	H2	TIP3	26	13.666	55.383	78.629	1.00
30	ATOM 13.37	2737	OH2	TIP3	27	4.331	54.670	67.201	1.00
	ATOM 0.00	2738	H1	TIP3	27	4.327	55.632	67.197	1.00
	ATOM 0.00	2739	H2	TIP3	27	4.327	54.437	66.270	1.00
35	ATOM 11.48	2740	OH2	TIP3	28	6.632	45.326	67.982	1.00
	ATOM 0.00	2741	H1	TIP3	28	6.608	46.242	67.924	1.00
40	ATOM 0.00	2742	H2	TIP3	28	6.631	45.075	67.039	1.00
	ATOM 10.05	2743	OH2	TIP3	29	24.783	78.595	73.991	1.00
	ATOM 0.00	2744	H1	TIP3	29	24.778	79.550	74.003	1.00
45	ATOM 0.00	2745	H2	TIP3	29	24.778	78.358	73.073	1.00
	ATOM 12.11	2746	OH2	TIP3	30	30.152	59.848	72.332	1.00
50	ATOM 0.00	2747	H1	TIP3	30	30.155	60.803	72.334	1.00
	ATOM 0.00	2748	H2	TIP3	30	30.157	59.604	71.413	1.00
	ATOM 14.18	2749	OH2	TIP3	31	25.969	23.735	78.543	1.00
55	ATOM 0.00	2750	H1	TIP3	31	26.022	24.715	78.548	1.00
	ATOM 0.00	2751	H2	TIP3	31	26.034	23.562	77.609	1.00

	ATOM 18.92	2752	OH2	TIP3	32	3.073	56.966	68.148	1.00
	ATOM 0.00	2753	H1	TIP3	32	3.062	57.921	68.149	1.00
5	ATOM 0.00	2754	H2	TIP3	32	3.064	56.716	67.222	1.00
	ATOM 17.22	2755	OH2	TIP3	33	6.529	52.062	70.116	1.00
10	ATOM 0.00	2756	H1	TIP3	33	6.515	53.004	70.134	1.00
	ATOM 0.00	2757	H2	TIP3	33	6.513	51.812	69.201	1.00
	ATOM 17.50	2758	OH2	TIP3	34	26.402	70.378	71.831	1.00
15	ATOM 0.00	2759	H1	TIP3	34	26.425	71.335	71.835	1.00
	ATOM 0.00	2760	H2	TIP3	34	26.425	70.133	70.905	1.00
	ATOM 15.92	2761	OH2	TIP3	35	30.299	41.047	81.602	1.00
20	ATOM 0.00	2762	H1	TIP3	35	30.269	42.006	81.613	1.00
	ATOM 0.00	2763	H2	TIP3	35	30.277	40.826	80.682	1.00
25	ATOM 13.79	2764	OH2	TIP3	36	13.099	71.465	72.644	1.00
	ATOM 0.00	2765	H1	TIP3	36	13.094	72.419	72.624	1.00
	ATOM 0.00	2766	H2	TIP3	36	13.088	71.217	71.707	1.00
30	ATOM 15.04	2767	OH2	TIP3	37	29.727	18.018	80.773	1.00
	ATOM 0.00	2768	H1	TIP3	37	29.725	18.973	80.787	1.00
35	ATOM 0.00	2769	H2	TIP3	37	29.726	17.774	79.864	1.00
	ATOM 19.58	2770	OH2	TIP3	38	36.064	38.671	74.415	1.00
40	ATOM 0.00	2771	H1	TIP3	38	36.087	39.602	74.431	1.00
	ATOM 0.00	2772	H2	TIP3	38	36.082	38.420	73.497	1.00
	ATOM 21.09	2773	OH2	TIP3	39	29.627	65.885	75.019	1.00
45	ATOM 0.00	2774	H1	TIP3	39	29.655	66.852	75.030	1.00
	ATOM 0.00	2775	H2	TIP3	39	29.655	65.661	74.098	1.00
	ATOM 13.90	2776	OH2	TIP3	40	16.595	52.544	84.851	1.00
50	ATOM 0.00	2777	H1	TIP3	40	16.565	53.498	84.853	1.00
	ATOM 0.00	2778	H2	TIP3	40	16.565	52.301	83.924	1.00
55	ATOM 20.52	2779	OH2	TIP3	41	4.206	43.642	85.694	1.00
	ATOM 0.00	2780	H1	TIP3	41	4.220	44.619	85.718	1.00



	ATOM 0.00	2781	H2	TIP3	41	4.220	43.432	84.778	1.00
	ATOM 14.26	2782	OH2	TIP3	42	29.857	58.327	74.600	1.00
5	ATOM 0.00	2783	H1	TIP3	42	29.858	59.293	74.612	1.00
	ATOM 0.00	2784	H2	TIP3	42	29.858	58.097	73.679	1.00
10	ATOM 13.92	2785	OH2	TIP3	43	16.161	19.916	80.183	1.00
	ATOM 0.00	2786	H1	TIP3	43	16.152	20.873	80.195	1.00
	ATOM 0.00	2787	H2	TIP3	43	16.152	19.673	79.264	1.00
15	ATOM 11.80	2788	OH2	TIP3	44	4.638	47.641	75.156	1.00
	ATOM 0.00	2789	H1	TIP3	44	4.658	48.599	75.161	1.00
	ATOM 0.00	2790	H2	TIP3	44	4.658	47.399	74.240	1.00
20	ATOM 15.07	2791	OH2	TIP3	45	15.020	76.683	76.321	1.00
	ATOM 0.00	2792	H1	TIP3	45	15.022	77.651	76.323	1.00
25	ATOM 0.00	2793	H2	TIP3	45	15.022	76.454	75.392	1.00
	ATOM 15.44	2794	OH2	TIP3	46	6.193	59.954	101.345	1.00
30	ATOM 0.00	2795	H1	TIP3	46	6.179	60.902	101.354	1.00
	ATOM 0.00	2796	H2	TIP3	46	6.179	59.702	100.426	1.00
	ATOM 10.14	2797	OH2	TIP3	47	14.081	45.728	83.666	1.00
35	ATOM 0.00	2798	H1	TIP3	47	14.071	46.678	83.675	1.00
	ATOM 0.00	2799	H2	TIP3	47	14.071	45.475	82.745	1.00
40	ATOM 17.96	2800	OH2	TIP3	48	14.304	25.203	81.378	1.00
	ATOM 0.00	2801	H1	TIP3	48	14.295	26.140	81.372	1.00
	ATOM 0.00	2802	H2	TIP3	48	14.295	24.933	80.447	1.00
45	ATOM 16.11	2803	OH2	TIP3	49	10.646	40.704	67.208	1.00
	ATOM 0.00	2804	H1	TIP3	49	10.619	41.662	67.206	1.00
50	ATOM 0.00	2805	H2	TIP3	49	10.619	40.464	66.278	1.00
	ATOM 18.07	2806	OH2	TIP3	50	33.324	41.993	62.711	1.00
	ATOM 0.00	2807	H1	TIP3	50	33.287	42.925	62.692	1.00
55	ATOM 0.00	2808	H2	TIP3	50	33.288	41.711	61.778	1.00
	ATOM 16.85	2809	OH2	TIP3	51	6.569	57.850	77.095	1.00

	ATOM 0.00	2810	H1	TIP3	51	6.578	58.806	77.099	1.00
	ATOM 0.00	2811	H2	TIP3	51	6.578	57.612	76.168	1.00
5	ATOM 18.95	2812	OH2	TIP3	52	17.054	28.788	80.134	1.00
	ATOM 0.00	2813	H1	TIP3	52	17.067	29.730	80.166	1.00
10	ATOM 0.00	2814	H2	TIP3	52	17.067	28.527	79.234	1.00
	ATOM 23.77	2815	OH2	TIP3	53	6.065	57.530	65.648	1.00
	ATOM 0.00	2816	H1	TIP3	53	6.086	58.499	65.665	1.00
15	ATOM 0.00	2817	H2	TIP3	53	6.086	57.308	64.732	1.00
	ATOM 13.96	2818	OH2	TIP3	54	17.752	52.844	80.755	1.00
20	ATOM 0.00	2819	H1	TIP3	54	17.734	53.803	80.742	1.00
	ATOM 0.00	2820	H2	TIP3	54	17.734	52.609	79.819	1.00
	ATOM 17.77	2821	OH2	TIP3	55	11.753	33.295	69.481	1.00
25	ATOM 0.00	2822	H1	TIP3	55	11.721	34.247	69.504	1.00
	ATOM 0.00	2823	H2	TIP3	55	11.721	33.053	68.572	1.00
30	ATOM 17.23	2824	OH2	TIP3	56	12.945	35.826	79.153	1.00
	ATOM 0.00	2825	H1	TIP3	56	12.909	36.781	79.168	1.00
	ATOM 0.00	2826	H2	TIP3	56	12.909	35.585	78.235	1.00
35	ATOM 25.03	2827	OH2	TIP3	57	40.075	43.408	77.618	1.00
	ATOM 0.00	2828	H1	TIP3	57	40.050	44.376	77.632	1.00
40	ATOM 0.00	2829	H2	TIP3	57	40.050	43.185	76.701	1.00
	ATOM 15.17	2830	OH2	TIP3	58	3.057	18.092	92.594	1.00
	ATOM 0.00	2831	H1	TIP3	58	3.038	19.049	92.595	1.00
45	ATOM 0.00	2832	H2	TIP3	58	3.044	17.853	91.666	1.00
	ATOM 18.92	2833	OH2	TIP3	59	13.402	23.676	95.191	1.00
50	ATOM 0.00	2834	H1	TIP3	59	13.392	24.628	95.178	1.00
	ATOM 0.00	2835	H2	TIP3	59	13.388	23.427	94.259	1.00
	ATOM 24.55	2836	OH2	TIP3	60	11.853	37.895	66.174	1.00
55	ATOM 0.00	2837	H1	TIP3	60	11.836	38.860	66.171	1.00
	ATOM 0.00	2838	H2	TIP3	60	11.836	37.670	65.243	1.00

	ATOM	2839	OH2	TIP3	61	24.411	67.363	74.598	1.00
	19.56								
	ATOM	2840	H1	TIP3	61	24.434	68.332	74.589	1.00
	0.00								
5	ATOM	2841	H2	TIP3	61	24.434	67.144	73.661	1.00
	0.00								
	ATOM	2842	OH2	TIP3	62	44.003	40.237	77.121	1.00
	31.94								
10	ATOM	2843	H1	TIP3	62	43.457	41.037	77.326	1.00
	0.00								
	ATOM	2844	H2	TIP3	62	43.436	39.913	76.436	1.00
	0.00								
	ATOM	2845	OH2	TIP3	63	1.339	21.721	100.240	1.00
	17.54								
15	ATOM	2846	H1	TIP3	63	1.339	22.673	100.256	1.00
	0.00								
	ATOM	2847	H2	TIP3	63	1.339	21.472	99.328	1.00
	0.00								
	ATOM	2848	OH2	TIP3	64	11.283	66.503	68.672	1.00
20	18.27								
	ATOM	2849	H1	TIP3	64	11.300	67.456	68.667	1.00
	0.00								
	ATOM	2850	H2	TIP3	64	11.300	66.256	67.742	1.00
	0.00								
25	ATOM	2851	OH2	TIP3	65	4.681	48.385	66.955	1.00
	26.86								
	ATOM	2852	H1	TIP3	65	4.695	49.332	66.942	1.00
	0.00								
	ATOM	2853	H2	TIP3	65	4.695	48.132	66.020	1.00
30	0.00								
	ATOM	2854	OH2	TIP3	66	23.486	29.111	77.108	1.00
	18.25								
	ATOM	2855	H1	TIP3	66	23.490	30.049	77.092	1.00
	0.00								
35	ATOM	2856	H2	TIP3	66	23.496	28.856	76.174	1.00
	0.00								
	ATOM	2857	OH2	TIP3	67	13.754	73.903	73.972	1.00
	16.09								
	ATOM	2858	H1	TIP3	67	13.743	74.857	73.965	1.00
40	0.00								
	ATOM	2859	H2	TIP3	67	13.743	73.658	73.039	1.00
	0.00								
	ATOM	2860	OH2	TIP3	68	15.325	54.153	81.648	1.00
	15.14								
45	ATOM	2861	H1	TIP3	68	15.321	55.104	81.648	1.00
	0.00								
	ATOM	2862	H2	TIP3	68	15.321	53.903	80.723	1.00
	0.00								
	ATOM	2863	OH2	TIP3	69	35.572	54.636	72.552	1.00
50	30.62								
	ATOM	2864	H1	TIP3	69	35.594	55.597	72.556	1.00
	0.00								
	ATOM	2865	H2	TIP3	69	35.594	54.403	71.625	1.00
	0.00								
55	ATOM	2866	OH2	TIP3	70	25.795	53.197	58.018	1.00
	33.10								
	ATOM	2867	H1	TIP3	70	25.769	54.178	58.023	1.00
	0.00								

	ATOM 0.00	2868	H2	TIP3	70	25.769	52.994	57.086	1.00
	ATOM 20.16	2869	OH2	TIP3	71	14.517	45.581	56.939	1.00
5	ATOM 0.00	2870	H1	TIP3	71	14.506	46.543	56.962	1.00
	ATOM 0.00	2871	H2	TIP3	71	14.506	45.346	56.025	1.00
10	ATOM 22.96	2872	OH2	TIP3	72	9.677	42.302	87.127	1.00
	ATOM 0.00	2873	H1	TIP3	72	9.690	43.260	87.147	1.00
	ATOM 0.00	2874	H2	TIP3	72	9.690	42.060	86.212	1.00
15	ATOM 26.31	2875	OH2	TIP3	73	24.579	26.235	78.496	1.00
	ATOM 0.00	2876	H1	TIP3	73	24.592	27.209	78.486	1.00
20	ATOM 0.00	2877	H2	TIP3	73	24.592	26.024	77.561	1.00
	ATOM 24.15	2878	OH2	TIP3	74	17.567	34.269	99.900	1.00
	ATOM 0.00	2879	H1	TIP3	74	17.549	35.217	99.899	1.00
25	ATOM 0.00	2880	H2	TIP3	74	17.550	34.016	98.977	1.00
	ATOM 36.60	2881	OH2	TIP3	75	32.076	34.036	97.002	1.00
30	ATOM 0.00	2882	H1	TIP3	75	32.061	34.984	97.041	1.00
	ATOM 0.00	2883	H2	TIP3	75	32.070	33.822	96.078	1.00
	ATOM 32.47	2884	OH2	TIP3	76	29.996	33.471	98.371	1.00
35	ATOM 0.00	2885	H1	TIP3	76	30.003	34.432	98.365	1.00
	ATOM 0.00	2886	H2	TIP3	76	30.003	33.240	97.440	1.00
40	ATOM 12.80	2887	OH2	TIP3	77	26.355	72.780	70.720	1.00
	ATOM 0.00	2888	H1	TIP3	77	26.352	73.726	70.722	1.00
	ATOM 0.00	2889	H2	TIP3	77	26.354	72.528	69.797	1.00
45	ATOM 11.11	2890	OH2	TIP3	78	12.021	33.492	80.130	1.00
	ATOM 0.00	2891	H1	TIP3	78	12.012	34.444	80.131	1.00
50	ATOM 0.00	2892	H2	TIP3	78	12.012	33.245	79.207	1.00
	ATOM 14.54	2893	OH2	TIP3	79	29.270	62.453	72.270	1.00
	ATOM 0.00	2894	H1	TIP3	79	29.280	63.420	72.244	1.00
55	ATOM 0.00	2895	H2	TIP3	79	29.280	62.224	71.323	1.00
	ATOM 14.48	2896	OH2	TIP3	80	26.858	65.447	74.374	1.00

	ATOM 0.00	2897	H1	TIP3	80	26.860	66.399	74.373	1.00
	ATOM 0.00	2898	H2	TIP3	80	26.866	65.196	73.462	1.00
5	ATOM 20.05	2899	OH2	TIP3	81	27.145	19.820	78.037	1.00
	ATOM 0.00	2900	H1	TIP3	81	27.159	20.786	78.038	1.00
10	ATOM 0.00	2901	H2	TIP3	81	27.159	19.591	77.112	1.00
	ATOM 22.88	2902	OH2	TIP3	82	29.828	36.381	82.139	1.00
	ATOM 0.00	2903	H1	TIP3	82	29.845	37.338	82.130	1.00
15	ATOM 0.00	2904	H2	TIP3	82	29.845	36.141	81.206	1.00
	ATOM 19.26	2905	OH2	TIP3	84	18.936	52.413	83.238	1.00
20	ATOM 0.00	2906	H1	TIP3	84	18.907	53.373	83.236	1.00
	ATOM 0.00	2907	H2	TIP3	84	18.907	52.179	82.308	1.00
	ATOM 23.28	2908	OH2	TIP3	85	27.489	24.446	94.600	1.00
25	ATOM 0.00	2909	H1	TIP3	85	27.499	25.406	94.617	1.00
	ATOM 0.00	2910	H2	TIP3	85	27.499	24.207	93.689	1.00
30	ATOM 20.60	2911	OH2	TIP3	86	-1.525	21.244	100.281	1.00
	ATOM 0.00	2912	H1	TIP3	86	-1.522	22.190	100.278	1.00
	ATOM 0.00	2913	H2	TIP3	86	-1.522	20.989	99.353	1.00
35	ATOM 21.69	2914	OH2	TIP3	87	15.694	35.478	101.363	1.00
	ATOM 0.00	2915	H1	TIP3	87	15.706	36.430	101.384	1.00
40	ATOM 0.00	2916	H2	TIP3	87	15.706	35.236	100.447	1.00
	ATOM 19.38	2917	OH2	TIP3	88	34.425	37.817	76.435	1.00
	ATOM 0.00	2918	H1	TIP3	88	34.435	38.779	76.430	1.00
45	ATOM 0.00	2919	H2	TIP3	88	34.435	37.591	75.503	1.00
	ATOM 24.69	2920	OH2	TIP3	89	24.246	74.238	76.852	1.00
50	ATOM 0.00	2921	H1	TIP3	89	24.243	75.192	76.866	1.00
	ATOM 0.00	2922	H2	TIP3	89	24.243	73.998	75.931	1.00
	ATOM 20.65	2923	OH2	TIP3	90	13.178	22.440	79.586	1.00
55	ATOM 0.00	2924	H1	TIP3	90	13.179	23.405	79.587	1.00
	ATOM 0.00	2925	H2	TIP3	90	13.179	22.206	78.661	1.00

	ATOM 14.50	2926	OH2	TIP3	91	9.901	52.179	79.541	1.00
	ATOM 0.00	2927	H1	TIP3	91	9.885	53.139	79.541	1.00
5	ATOM 0.00	2928	H2	TIP3	91	9.885	51.939	78.615	1.00
	ATOM 24.37	2929	OH2	TIP3	92	20.065	71.147	85.203	1.00
10	ATOM 0.00	2930	H1	TIP3	92	20.041	72.108	85.216	1.00
	ATOM 0.00	2931	H2	TIP3	92	20.041	70.911	84.282	1.00
	ATOM 20.98	2932	OH2	TIP3	93	4.592	59.423	77.902	1.00
15	ATOM 0.00	2933	H1	TIP3	93	4.607	60.387	77.908	1.00
	ATOM 0.00	2934	H2	TIP3	93	4.607	59.198	76.976	1.00
20	ATOM 20.16	2935	OH2	TIP3	94	10.454	59.113	64.371	1.00
	ATOM 0.00	2936	H1	TIP3	94	10.456	60.064	64.357	1.00
	ATOM 0.00	2937	H2	TIP3	94	10.456	58.865	63.436	1.00
25	ATOM 18.46	2938	OH2	TIP3	95	17.505	51.846	87.411	1.00
	ATOM 0.00	2939	H1	TIP3	95	17.475	52.799	87.416	1.00
30	ATOM 0.00	2940	H2	TIP3	95	17.475	51.604	86.488	1.00
	ATOM 20.43	2941	OH2	TIP3	96	14.817	19.185	88.279	1.00
	ATOM 0.00	2942	H1	TIP3	96	14.808	20.144	88.264	1.00
35	ATOM 0.00	2943	H2	TIP3	96	14.808	18.951	87.347	1.00
	ATOM 26.87	2944	OH2	TIP3	98	22.550	31.892	72.695	1.00
40	ATOM 0.00	2945	H1	TIP3	98	22.604	32.834	72.780	1.00
	ATOM 0.00	2946	H2	TIP3	98	22.605	31.632	71.822	1.00
	ATOM 19.46	2947	OH2	TIP3	99	16.431	46.142	86.054	1.00
45	ATOM 0.00	2948	H1	TIP3	99	16.410	47.101	86.053	1.00
	ATOM 0.00	2949	H2	TIP3	99	16.412	45.907	85.128	1.00
50	ATOM 21.01	2950	OH2	TIP3	100	32.761	59.838	71.205	1.00
	ATOM 0.00	2951	H1	TIP3	100	32.787	60.797	71.210	1.00
	ATOM 0.00	2952	H2	TIP3	100	32.789	59.595	70.293	1.00
55	ATOM 24.38	2953	OH2	TIP3	101	12.534	45.025	99.009	1.00
	ATOM 0.00	2954	H1	TIP3	101	12.550	45.969	99.012	1.00

	ATOM 0.00	2955	H2	TIP3	101	12.550	44.767	98.085	1.00
	ATOM 20.83	2956	OH2	TIP3	102	15.287	38.470	102.089	1.00
5	ATOM 0.00	2957	H1	TIP3	102	15.270	39.417	102.112	1.00
	ATOM 0.00	2958	H2	TIP3	102	15.270	38.212	101.180	1.00
10	ATOM 19.97	2959	OH2	TIP3	103	-1.791	21.163	94.344	1.00
	ATOM 0.00	2960	H1	TIP3	103	-1.773	22.122	94.336	1.00
	ATOM 0.00	2961	H2	TIP3	103	-1.775	20.933	93.418	1.00
15	ATOM 22.28	2962	OH2	TIP3	104	23.344	43.006	94.136	1.00
	ATOM 0.00	2963	H1	TIP3	104	23.328	43.972	94.120	1.00
	ATOM 0.00	2964	H2	TIP3	104	23.328	42.778	93.195	1.00
20	ATOM 24.15	2965	OH2	TIP3	105	24.245	18.434	94.544	1.00
	ATOM 0.00	2966	H1	TIP3	105	24.232	19.393	94.540	1.00
25	ATOM 0.00	2967	H2	TIP3	105	24.232	18.194	93.617	1.00
	ATOM 23.57	2968	OH2	TIP3	106	32.538	63.422	69.289	1.00
30	ATOM 0.00	2969	H1	TIP3	106	32.501	64.379	69.349	1.00
	ATOM 0.00	2970	H2	TIP3	106	32.500	63.180	68.399	1.00
	ATOM 22.75	2971	OH2	TIP3	107	32.847	33.726	71.640	1.00
35	ATOM 0.00	2972	H1	TIP3	107	32.842	34.676	71.651	1.00
	ATOM 0.00	2973	H2	TIP3	107	32.842	33.471	70.723	1.00
	ATOM 22.81	2974	OH2	TIP3	108	6.155	39.952	88.035	1.00
40	ATOM 0.00	2975	H1	TIP3	108	6.119	40.912	88.037	1.00
	ATOM 0.00	2976	H2	TIP3	108	6.119	39.714	87.107	1.00
45	ATOM 27.86	2977	OH2	TIP3	109	27.765	29.208	75.507	1.00
	ATOM 0.00	2978	H1	TIP3	109	27.701	30.128	75.507	1.00
	ATOM 0.00	2979	H2	TIP3	109	27.702	28.917	74.585	1.00
50	ATOM 27.76	2980	OH2	TIP3	110	34.641	32.194	91.953	1.00
	ATOM 0.00	2981	H1	TIP3	110	34.657	33.159	91.941	1.00
55	ATOM 0.00	2982	H2	TIP3	110	34.657	31.965	91.017	1.00
	ATOM 22.40	2983	OH2	TIP3	111	5.934	50.021	63.248	1.00

	ATOM	2984	H1	TIP3	111	5.943	50.984	63.248	1.00
	0.00								
	ATOM	2985	H2	TIP3	111	5.943	49.791	62.317	1.00
	0.00								
5	ATOM	2986	OH2	TIP3	112	7.947	27.996	92.109	1.00
	26.50								
	ATOM	2987	H1	TIP3	112	7.940	28.966	92.116	1.00
	0.00								
10	ATOM	2988	H2	TIP3	112	7.940	27.778	91.185	1.00
	0.00								
	ATOM	2989	OH2	TIP3	113	4.672	62.116	78.254	1.00
	20.82								
	ATOM	2990	H1	TIP3	113	4.662	63.064	78.251	1.00
	0.00								
15	ATOM	2991	H2	TIP3	113	4.662	61.865	77.325	1.00
	0.00								
	ATOM	2992	OH2	TIP3	114	12.054	21.331	95.197	1.00
	26.63								
	ATOM	2993	H1	TIP3	114	12.049	22.291	95.167	1.00
	0.00								
20	ATOM	2994	H2	TIP3	114	12.052	21.095	94.254	1.00
	0.00								
	ATOM	2995	OH2	TIP3	115	-5.706	20.084	93.477	1.00
	29.07								
25	ATOM	2996	H1	TIP3	115	-5.716	21.048	93.469	1.00
	0.00								
	ATOM	2997	H2	TIP3	115	-5.716	19.857	92.543	1.00
	0.00								
	ATOM	2998	OH2	TIP3	116	34.282	48.971	60.475	1.00
	24.24								
30	ATOM	2999	H1	TIP3	116	34.275	49.932	60.475	1.00
	0.00								
	ATOM	3000	H2	TIP3	116	34.275	48.735	59.548	1.00
	0.00								
35	ATOM	3001	OH2	TIP3	117	15.304	39.745	90.950	1.00
	20.18								
	ATOM	3002	H1	TIP3	117	15.290	40.701	90.942	1.00
	0.00								
	ATOM	3003	H2	TIP3	117	15.288	39.499	90.029	1.00
	0.00								
40	ATOM	3004	OH2	TIP3	118	20.425	34.287	86.652	1.00
	21.38								
	ATOM	3005	H1	TIP3	118	20.420	35.252	86.644	1.00
	0.00								
45	ATOM	3006	H2	TIP3	118	20.420	34.057	85.722	1.00
	0.00								
	ATOM	3007	OH2	TIP3	119	12.946	30.671	72.330	1.00
	21.81								
	ATOM	3008	H1	TIP3	119	12.939	31.621	72.336	1.00
	0.00								
50	ATOM	3009	H2	TIP3	119	12.939	30.415	71.413	1.00
	0.00								
	ATOM	3010	OH2	TIP3	120	29.267	70.890	70.793	1.00
	22.48								
55	ATOM	3011	H1	TIP3	120	29.268	71.844	70.799	1.00
	0.00								
	ATOM	3012	H2	TIP3	120	29.268	70.649	69.867	1.00
	0.00								



	ATOM 27.35	3013	OH2	TIP3	121	6.147	34.663	75.934	1.00
	ATOM 0.00	3014	H1	TIP3	121	6.142	35.632	75.940	1.00
5	ATOM 0.00	3015	H2	TIP3	121	6.142	34.437	75.013	1.00
	ATOM 24.47	3016	OH2	TIP3	122	26.574	74.898	74.914	1.00
10	ATOM 0.00	3017	H1	TIP3	122	26.584	75.856	74.919	1.00
	ATOM 0.00	3018	H2	TIP3	122	26.584	74.655	73.993	1.00
	ATOM 27.91	3019	OH2	TIP3	123	40.624	38.731	69.437	1.00
15	ATOM 0.00	3020	H1	TIP3	123	40.626	39.681	69.432	1.00
	ATOM 0.00	3021	H2	TIP3	123	40.631	38.485	68.506	1.00
20	ATOM 23.98	3022	OH2	TIP3	124	18.335	74.758	79.540	1.00
	ATOM 0.00	3023	H1	TIP3	124	18.311	75.715	79.532	1.00
	ATOM 0.00	3024	H2	TIP3	124	18.309	74.518	78.613	1.00
25	ATOM 25.27	3025	OH2	TIP3	125	24.254	25.876	95.658	1.00
	ATOM 0.00	3026	H1	TIP3	125	24.260	26.817	95.653	1.00
30	ATOM 0.00	3027	H2	TIP3	125	24.258	25.610	94.733	1.00
	ATOM 26.51	3028	OH2	TIP3	126	27.246	26.940	73.274	1.00
	ATOM 0.00	3029	H1	TIP3	126	27.105	27.879	73.539	1.00
35	ATOM 0.00	3030	H2	TIP3	126	27.084	26.684	72.509	1.00
	ATOM 31.80	3031	OH2	TIP3	127	34.397	35.886	70.708	1.00
40	ATOM 0.00	3032	H1	TIP3	127	34.382	36.839	70.706	1.00
	ATOM 0.00	3033	H2	TIP3	127	34.382	35.642	69.782	1.00
	ATOM 30.85	3034	OH2	TIP3	128	9.465	66.059	80.174	1.00
45	ATOM 0.00	3035	H1	TIP3	128	9.469	67.026	80.156	1.00
	ATOM 0.00	3036	H2	TIP3	128	9.469	65.836	79.229	1.00
50	ATOM 27.38	3037	OH2	TIP3	129	5.931	42.078	93.970	1.00
	ATOM 0.00	3038	H1	TIP3	129	5.912	43.032	93.981	1.00
	ATOM 0.00	3039	H2	TIP3	129	5.912	41.838	93.047	1.00
55	ATOM 38.29	3040	OH2	TIP3	130	20.620	40.016	85.891	1.00
	ATOM 0.00	3041	H1	TIP3	130	20.594	40.972	85.901	1.00

	ATOM 0.00	3042	H2	TIP3	130	20.594	39.776	84.970	1.00
	ATOM 32.96	3043	OH2	TIP3	131	22.022	36.821	86.431	1.00
5	ATOM 0.00	3044	H1	TIP3	131	21.996	37.776	86.440	1.00
	ATOM 0.00	3045	H2	TIP3	131	21.996	36.580	85.509	1.00
10	ATOM 22.74	3046	OH2	TIP3	132	20.893	36.741	83.379	1.00
	ATOM 0.00	3047	H1	TIP3	132	20.877	37.688	83.396	1.00
	ATOM 0.00	3048	H2	TIP3	132	20.877	36.485	82.465	1.00
15	ATOM 21.15	3049	OH2	TIP3	133	23.406	58.660	84.323	1.00
	ATOM 0.00	3050	H1	TIP3	133	23.406	59.609	84.347	1.00
20	ATOM 0.00	3051	H2	TIP3	133	23.406	58.410	83.417	1.00
	ATOM 36.35	3052	OH2	TIP3	134	23.629	54.392	85.766	1.00
	ATOM 0.00	3053	H1	TIP3	134	23.628	55.363	85.762	1.00
25	ATOM 0.00	3054	H2	TIP3	134	23.630	54.174	84.835	1.00
	ATOM 30.51	3055	OH2	TIP3	135	22.408	62.871	89.478	1.00
30	ATOM 0.00	3056	H1	TIP3	135	22.406	63.808	89.470	1.00
	ATOM 0.00	3057	H2	TIP3	135	22.376	62.612	88.565	1.00
	ATOM 30.89	3058	OH2	TIP3	136	19.425	59.372	89.140	1.00
35	ATOM 0.00	3059	H1	TIP3	136	19.425	60.328	89.123	1.00
	ATOM 0.00	3060	H2	TIP3	136	19.427	59.136	88.202	1.00
40	ATOM 28.83	3061	OH2	TIP3	137	11.615	59.513	87.932	1.00
	ATOM 0.00	3062	H1	TIP3	137	11.605	60.461	87.938	1.00
	ATOM 0.00	3063	H2	TIP3	137	11.605	59.258	87.013	1.00
45	ATOM 29.32	3064	OH2	TIP3	138	12.694	69.504	76.549	1.00
	ATOM 0.00	3065	H1	TIP3	138	12.696	70.443	76.547	1.00
50	ATOM 0.00	3066	H2	TIP3	138	12.698	69.237	75.628	1.00
	ATOM 28.64	3067	OH2	TIP3	139	32.023	33.237	67.973	1.00
	ATOM 0.00	3068	H1	TIP3	139	32.022	34.198	67.957	1.00
55	ATOM 0.00	3069	H2	TIP3	139	32.022	33.008	67.035	1.00
	ATOM 22.76	3070	OH2	TIP3	140	26.673	28.035	77.708	1.00

	ATOM 0.00	3071	H1	TIP3	140	26.701	28.969	77.676	1.00
	ATOM 0.00	3072	H2	TIP3	140	26.701	27.768	76.777	1.00
5	ATOM 30.71	3073	OH2	TIP3	141	32.465	52.473	65.827	1.00
	ATOM 0.00	3074	H1	TIP3	141	32.493	53.434	65.832	1.00
10	ATOM 0.00	3075	H2	TIP3	141	32.493	52.238	64.904	1.00
	ATOM 25.89	3076	OH2	TIP3	142	28.087	61.297	62.694	1.00
	ATOM 0.00	3077	H1	TIP3	142	28.121	62.254	62.696	1.00
15	ATOM 0.00	3078	H2	TIP3	142	28.121	61.054	61.769	1.00
	ATOM 29.32	3079	OH2	TIP3	143	3.030	49.726	71.581	1.00
	ATOM 0.00	3080	H1	TIP3	143	3.019	50.689	71.562	1.00
20	ATOM 0.00	3081	H2	TIP3	143	3.019	49.500	70.637	1.00
	ATOM 22.68	3082	OH2	TIP3	144	3.075	49.647	74.581	1.00
25	ATOM 0.00	3083	H1	TIP3	144	3.069	50.596	74.585	1.00
	ATOM 0.00	3084	H2	TIP3	144	3.069	49.398	73.657	1.00
30	ATOM 25.00	3085	OH2	TIP3	145	5.155	55.012	64.654	1.00
	ATOM 0.00	3086	H1	TIP3	145	5.114	55.977	64.654	1.00
	ATOM 0.00	3087	H2	TIP3	145	5.114	54.783	63.725	1.00
35	ATOM 27.65	3088	OH2	TIP3	146	2.649	52.569	67.943	1.00
	ATOM 0.00	3089	H1	TIP3	146	2.598	53.542	67.945	1.00
40	ATOM 0.00	3090	H2	TIP3	146	2.598	52.353	67.013	1.00
	ATOM 23.75	3091	OH2	TIP3	147	25.491	46.315	95.161	1.00
	ATOM 0.00	3092	H1	TIP3	147	25.505	47.272	95.167	1.00
45	ATOM 0.00	3093	H2	TIP3	147	25.505	46.074	94.235	1.00
	ATOM 32.65	3094	OH2	TIP3	148	24.063	56.944	86.112	1.00
50	ATOM 0.00	3095	H1	TIP3	148	24.066	57.893	86.106	1.00
	ATOM 0.00	3096	H2	TIP3	148	24.066	56.690	85.182	1.00
	ATOM 30.10	3097	OH2	TIP3	149	9.768	51.724	89.764	1.00
55	ATOM 0.00	3098	H1	TIP3	149	9.550	52.635	89.797	1.00
	ATOM 0.00	3099	H2	TIP3	149	9.559	51.416	88.881	1.00

	ATOM	3100	OH2	TIP3	150	12.830	31.443	74.972	1.00
	18.61								
	ATOM	3101	H1	TIP3	150	12.785	32.361	75.002	1.00
	0.00								
5	ATOM	3102	H2	TIP3	150	12.786	31.134	74.076	1.00
	0.00								
	ATOM	3103	OH2	TIP3	151	12.058	29.386	75.911	1.00
	26.41								
10	ATOM	3104	H1	TIP3	151	12.139	30.373	75.907	1.00
	0.00								
	ATOM	3105	H2	TIP3	151	12.148	29.211	74.968	1.00
	0.00								
	ATOM	3106	OH2	TIP3	152	21.920	58.891	87.253	1.00
	24.49								
15	ATOM	3107	H1	TIP3	152	21.940	59.824	87.237	1.00
	0.00								
	ATOM	3108	H2	TIP3	152	21.940	58.618	86.318	1.00
	0.00								
	ATOM	3109	OH2	TIP3	153	10.991	44.408	57.618	1.00
20	30.05								
	ATOM	3110	H1	TIP3	153	11.001	45.351	57.616	1.00
	0.00								
	ATOM	3111	H2	TIP3	153	11.001	44.143	56.693	1.00
	0.00								
25	ATOM	3112	OH2	TIP3	154	14.634	59.750	88.168	1.00
	26.28								
	ATOM	3113	H1	TIP3	154	14.619	60.708	88.160	1.00
	0.00								
	ATOM	3114	H2	TIP3	154	14.619	59.504	87.239	1.00
30	0.00								
	ATOM	3115	OH2	TIP3	155	3.782	51.970	70.479	1.00
	31.90								
	ATOM	3116	H1	TIP3	155	3.755	52.919	70.475	1.00
	0.00								
35	ATOM	3117	H2	TIP3	155	3.755	51.716	69.553	1.00
	0.00								
	ATOM	3118	OH2	TIP3	156	4.635	28.099	96.066	1.00
	26.26								
	ATOM	3119	H1	TIP3	156	4.632	29.065	96.071	1.00
40	0.00								
	ATOM	3120	H2	TIP3	156	4.632	27.872	95.143	1.00
	0.00								
	ATOM	3121	OH2	TIP3	157	18.575	41.802	92.535	1.00
	36.30								
45	ATOM	3122	H1	TIP3	157	18.614	42.757	92.517	1.00
	0.00								
	ATOM	3123	H2	TIP3	157	18.614	41.555	91.599	1.00
	0.00								
	ATOM	3124	OH2	TIP3	158	22.860	41.454	83.366	1.00
50	35.87								
	ATOM	3125	H1	TIP3	158	22.858	42.404	83.372	1.00
	0.00								
	ATOM	3126	H2	TIP3	158	22.858	41.204	82.446	1.00
	0.00								
55	ATOM	3127	OH2	TIP3	159	11.591	46.630	90.976	1.00
	25.90								
	ATOM	3128	H1	TIP3	159	11.624	47.583	91.014	1.00
	0.00								

	ATOM	3129	H2	TIP3	159	11.624	46.384	90.077	1.00
	0.00								
	ATOM	3130	OH2	TIP3	160	10.980	42.843	89.397	1.00
	25.17								
5	ATOM	3131	H1	TIP3	160	10.945	43.804	89.370	1.00
	0.00								
	ATOM	3132	H2	TIP3	160	10.948	42.611	88.449	1.00
	0.00								
10	ATOM	3133	OH2	TIP3	161	2.899	52.279	89.567	1.00
	35.93								
	ATOM	3134	H1	TIP3	161	2.875	53.239	89.576	1.00
	0.00								
	ATOM	3135	H2	TIP3	161	2.884	52.048	88.642	1.00
	0.00								
15	ATOM	3136	OH2	TIP3	162	1.360	52.599	87.123	1.00
	33.19								
	ATOM	3137	H1	TIP3	162	1.380	53.547	87.127	1.00
	0.00								
20	ATOM	3138	H2	TIP3	162	1.380	52.347	86.199	1.00
	0.00								
	ATOM	3139	OH2	TIP3	163	31.471	41.458	88.534	1.00
	28.07								
	ATOM	3140	H1	TIP3	163	31.480	42.416	88.537	1.00
	0.00								
25	ATOM	3141	H2	TIP3	163	31.480	41.221	87.611	1.00
	0.00								
	ATOM	3142	OH2	TIP3	164	31.236	37.995	83.715	1.00
	35.98								
30	ATOM	3143	H1	TIP3	164	31.244	38.937	83.680	1.00
	0.00								
	ATOM	3144	H2	TIP3	164	31.244	37.740	82.766	1.00
	0.00								
	ATOM	3145	OH2	TIP3	165	27.212	63.696	87.135	1.00
	31.88								
35	ATOM	3146	H1	TIP3	165	27.267	64.673	87.158	1.00
	0.00								
	ATOM	3147	H2	TIP3	165	27.267	63.485	86.220	1.00
	0.00								
40	ATOM	3148	OH2	TIP3	166	16.681	64.326	68.227	1.00
	14.19								
	ATOM	3149	H1	TIP3	166	16.644	65.299	68.243	1.00
	0.00								
	ATOM	3150	H2	TIP3	166	16.644	64.102	67.313	1.00
	0.00								
45	ATOM	3151	OH2	TIP3	167	6.593	17.748	94.755	1.00
	16.77								
	ATOM	3152	H1	TIP3	167	6.603	18.698	94.780	1.00
	0.00								
50	ATOM	3153	H2	TIP3	167	6.603	17.497	93.847	1.00
	0.00								
	ATOM	3154	OH2	TIP3	168	3.319	56.318	74.128	1.00
	35.41								
	ATOM	3155	H1	TIP3	168	3.338	57.270	74.109	1.00
	0.00								
55	ATOM	3156	H2	TIP3	168	3.338	56.073	73.190	1.00
	0.00								
	ATOM	3157	OH2	TIP3	169	17.419	44.179	55.313	1.00
	27.44								

	ATOM	3158	H1	TIP3	169	17.421	45.116	55.309	1.00
	0.00								
	ATOM	3159	H2	TIP3	169	17.418	43.918	54.386	1.00
	0.00								
5	ATOM	3160	OH2	TIP3	170	23.116	45.953	85.369	1.00
	30.99								
	ATOM	3161	H1	TIP3	170	23.152	46.921	85.402	1.00
	0.00								
10	ATOM	3162	H2	TIP3	170	23.155	45.744	84.459	1.00
	0.00								
	ATOM	3163	OH2	TIP3	171	23.784	31.626	74.741	1.00
	27.99								
	ATOM	3164	H1	TIP3	171	23.692	32.577	74.679	1.00
	0.00								
15	ATOM	3165	H2	TIP3	171	23.699	31.381	73.782	1.00
	0.00								
	ATOM	3166	OH2	TIP3	172	29.228	23.854	78.309	1.00
	33.69								
	ATOM	3167	H1	TIP3	172	29.203	24.821	78.316	1.00
20	0.00								
	ATOM	3168	H2	TIP3	172	29.203	23.628	77.385	1.00
	0.00								
	ATOM	3169	OH2	TIP3	173	12.110	62.970	61.321	1.00
	30.60								
25	ATOM	3170	H1	TIP3	173	12.072	63.931	61.315	1.00
	0.00								
	ATOM	3171	H2	TIP3	173	12.072	62.735	60.389	1.00
	0.00								
	ATOM	3172	OH2	TIP3	174	7.496	21.769	90.909	1.00
30	29.01								
	ATOM	3173	H1	TIP3	174	7.519	22.745	90.874	1.00
	0.00								
	ATOM	3174	H2	TIP3	174	7.514	21.560	89.967	1.00
	0.00								
35	ATOM	3175	OH2	TIP3	175	6.066	34.847	93.635	1.00
	28.39								
	ATOM	3176	H1	TIP3	175	6.053	35.815	93.632	1.00
	0.00								
	ATOM	3177	H2	TIP3	175	6.049	34.618	92.720	1.00
40	0.00								
	ATOM	3178	OH2	TIP3	176	6.593	44.033	89.946	1.00
	33.99								
	ATOM	3179	H1	TIP3	176	6.575	44.965	89.812	1.00
	0.00								
45	ATOM	3180	H2	TIP3	176	6.621	43.816	89.011	1.00
	0.00								
	ATOM	3181	OH2	TIP3	177	10.295	25.226	82.030	1.00
	32.08								
	ATOM	3182	H1	TIP3	177	10.182	26.172	82.011	1.00
50	0.00								
	ATOM	3183	H2	TIP3	177	10.184	24.969	81.098	1.00
	0.00								
	ATOM	3184	OH2	TIP3	178	0.809	45.203	71.524	1.00
	25.10								
55	ATOM	3185	H1	TIP3	178	0.842	46.181	71.532	1.00
	0.00								
	ATOM	3186	H2	TIP3	178	0.842	44.995	70.597	1.00
	0.00								

	ATOM	3187	OH2	TIP3	179	22.972	43.363	102.150	1.00
	36.75								
	ATOM	3188	H1	TIP3	179	22.966	44.314	102.170	1.00
	0.00								
5	ATOM	3189	H2	TIP3	179	22.966	43.115	101.236	1.00
	0.00								
	ATOM	3190	OH2	TIP3	180	23.237	48.451	85.106	1.00
	35.30								
10	ATOM	3191	H1	TIP3	180	23.257	49.383	85.127	1.00
	0.00								
	ATOM	3192	H2	TIP3	180	23.257	48.176	84.197	1.00
	0.00								
	ATOM	3193	OH2	TIP3	181	4.043	34.705	85.757	1.00
	24.15								
15	ATOM	3194	H1	TIP3	181	4.019	35.656	85.771	1.00
	0.00								
	ATOM	3195	H2	TIP3	181	4.019	34.455	84.843	1.00
	0.00								
	ATOM	3196	OH2	TIP3	182	20.691	39.215	94.052	1.00
20	26.94								
	ATOM	3197	H1	TIP3	182	20.695	40.183	94.093	1.00
	0.00								
	ATOM	3198	H2	TIP3	182	20.695	38.991	93.152	1.00
	0.00								
25	ATOM	3199	OH2	TIP3	183	-1.097	50.890	82.306	1.00
	33.75								
	ATOM	3200	H1	TIP3	183	-1.253	51.786	82.212	1.00
	0.00								
30	ATOM	3201	H2	TIP3	183	-1.081	50.637	81.373	1.00
	0.00								
	ATOM	3202	OH2	TIP3	184	31.787	63.274	71.545	1.00
	28.87								
	ATOM	3203	H1	TIP3	184	31.798	64.222	71.479	1.00
	0.00								
35	ATOM	3204	H2	TIP3	184	31.789	63.019	70.587	1.00
	0.00								
	ATOM	3205	OH2	TIP3	185	14.762	22.784	82.023	1.00
	32.79								
	ATOM	3206	H1	TIP3	185	14.723	23.746	82.025	1.00
40	0.00								
	ATOM	3207	H2	TIP3	185	14.721	22.557	81.094	1.00
	0.00								
	ATOM	3208	OH2	TIP3	186	30.806	69.844	80.444	1.00
	32.26								
45	ATOM	3209	H1	TIP3	186	30.787	70.789	80.464	1.00
	0.00								
	ATOM	3210	H2	TIP3	186	30.787	69.583	79.535	1.00
	0.00								
	ATOM	3211	OH2	TIP3	187	18.427	72.812	83.951	1.00
50	27.54								
	ATOM	3212	H1	TIP3	187	18.458	73.765	83.955	1.00
	0.00								
	ATOM	3213	H2	TIP3	187	18.458	72.563	83.028	1.00
	0.00								
55	ATOM	3214	OH2	TIP3	188	34.648	25.709	92.039	1.00
	33.88								
	ATOM	3215	H1	TIP3	188	34.651	26.665	92.028	1.00
	0.00								

	ATOM 0.00	3216	H2	TIP3	188	34.651	25.467	91.107	1.00
	ATOM 25.78	3217	OH2	TIP3	189	33.550	56.144	79.255	1.00
5	ATOM 0.00	3218	H1	TIP3	189	33.568	57.112	79.229	1.00
	ATOM 0.00	3219	H2	TIP3	189	33.568	55.923	78.308	1.00
10	ATOM 27.89	3220	OH2	TIP3	190	31.588	65.742	72.966	1.00
	ATOM 0.00	3221	H1	TIP3	190	31.537	66.700	72.938	1.00
	ATOM 0.00	3222	H2	TIP3	190	31.537	65.505	72.021	1.00
15	ATOM 36.57	3223	OH2	TIP3	191	34.007	49.937	64.148	1.00
	ATOM 0.00	3224	H1	TIP3	191	34.017	50.899	64.136	1.00
20	ATOM 0.00	3225	H2	TIP3	191	34.017	49.704	63.211	1.00
	ATOM 35.11	3226	OH2	TIP3	192	35.774	52.177	76.491	1.00
	ATOM 0.00	3227	H1	TIP3	192	35.764	53.126	76.478	1.00
25	ATOM 0.00	3228	H2	TIP3	192	35.764	51.926	75.558	1.00
	ATOM 42.65	3229	OH2	TIP3	193	14.266	18.832	81.850	1.00
30	ATOM 0.00	3230	H1	TIP3	193	14.506	19.737	82.028	1.00
	ATOM 0.00	3231	H2	TIP3	193	14.529	18.531	81.024	1.00
	ATOM 40.28	3232	OH2	TIP3	194	1.553	57.603	65.331	1.00
35	ATOM 0.00	3233	H1	TIP3	194	1.557	58.563	65.337	1.00
	ATOM 0.00	3234	H2	TIP3	194	1.557	57.368	64.404	1.00
40	ATOM 32.17	3235	OH2	TIP3	195	4.422	32.123	88.838	1.00
	ATOM 0.00	3236	H1	TIP3	195	4.416	33.067	88.833	1.00
	ATOM 0.00	3237	H2	TIP3	195	4.416	31.861	87.913	1.00
45	ATOM 31.04	3238	OH2	TIP3	196	14.003	45.749	53.783	1.00
	ATOM 0.00	3239	H1	TIP3	196	13.997	46.724	53.783	1.00
50	ATOM 0.00	3240	H2	TIP3	196	13.997	45.534	52.856	1.00
	ATOM 28.31	3241	OH2	TIP3	197	31.903	51.874	80.070	1.00
	ATOM 0.00	3242	H1	TIP3	197	31.894	52.799	80.038	1.00
55	ATOM 0.00	3243	H2	TIP3	197	31.902	51.577	79.144	1.00
	ATOM 30.41	3244	OH2	TIP3	198	7.885	33.930	71.780	1.00



5	ATOM 0.00	3245	H1	TIP3	198	7.859	34.885	71.781	1.00
	ATOM 0.00	3246	H2	TIP3	198	7.859	33.686	70.856	1.00
	ATOM 36.70	3247	OH2	TIP3	199	2.175	52.836	74.373	1.00
10	ATOM 0.00	3248	H1	TIP3	199	2.210	53.787	74.386	1.00
	ATOM 0.00	3249	H2	TIP3	199	2.209	52.586	73.455	1.00
	ATOM 37.76	3250	OH2	TIP3	200	27.709	21.730	94.653	1.00
15	ATOM 0.00	3251	H1	TIP3	200	27.712	22.691	94.669	1.00
	ATOM 0.00	3252	H2	TIP3	200	27.712	21.498	93.733	1.00
	ATOM 38.46	3253	OH2	TIP3	201	6.824	43.909	85.895	1.00
20	ATOM 0.00	3254	H1	TIP3	201	6.800	44.826	85.981	1.00
	ATOM 0.00	3255	H2	TIP3	201	6.797	43.646	85.033	1.00
	ATOM 36.70	3256	OH2	TIP3	202	41.467	40.084	77.723	1.00
25	ATOM 0.00	3257	H1	TIP3	202	41.162	40.956	77.648	1.00
	ATOM 0.00	3258	H2	TIP3	202	41.208	39.765	76.819	1.00
	ATOM 33.76	3259	OH2	TIP3	203	38.042	58.700	67.769	1.00
30	ATOM 0.00	3260	H1	TIP3	203	38.054	59.649	67.790	1.00
	ATOM 0.00	3261	H2	TIP3	203	38.054	58.449	66.854	1.00
	ATOM 35.59	3262	OH2	TIP3	204	28.693	45.564	82.956	1.00
35	ATOM 0.00	3263	H1	TIP3	204	28.704	46.525	82.980	1.00
	ATOM 0.00	3264	H2	TIP3	204	28.704	45.329	82.041	1.00
	ATOM 21.86	3265	OH2	TIP3	205	11.506	37.834	80.089	1.00
40	ATOM 0.00	3266	H1	TIP3	205	11.474	38.794	80.096	1.00
	ATOM 0.00	3267	H2	TIP3	205	11.476	37.605	79.167	1.00
	ATOM 33.01	3268	OH2	TIP3	206	13.581	38.686	104.175	1.00
45	ATOM 0.00	3269	H1	TIP3	206	13.577	39.652	104.176	1.00
	ATOM 0.00	3270	H2	TIP3	206	13.577	38.461	103.247	1.00
	ATOM 36.71	3271	OH2	TIP3	207	6.466	43.750	66.221	1.00
50	ATOM 0.00	3272	H1	TIP3	207	6.485	44.742	66.266	1.00
	ATOM 0.00	3273	H2	TIP3	207	6.486	43.565	65.319	1.00

	ATOM	3274	OH2	TIP3	208	18.075	49.217	87.796	1.00
	33.12								
	ATOM	3275	H1	TIP3	208	18.046	50.173	87.776	1.00
	0.00								
5	ATOM	3276	H2	TIP3	208	18.044	48.989	86.865	1.00
	0.00								
	ATOM	3277	OH2	TIP3	209	28.496	52.689	58.003	1.00
	35.36								
10	ATOM	3278	H1	TIP3	209	28.443	53.649	58.016	1.00
	0.00								
	ATOM	3279	H2	TIP3	209	28.443	52.456	57.082	1.00
	0.00								
	ATOM	3280	OH2	TIP3	210	27.292	25.593	77.744	1.00
	34.42								
15	ATOM	3281	H1	TIP3	210	27.116	26.481	77.454	1.00
	0.00								
	ATOM	3282	H2	TIP3	210	27.146	25.341	76.779	1.00
	0.00								
	ATOM	3283	OH2	TIP3	211	33.979	35.777	78.853	1.00
20	32.89								
	ATOM	3284	H1	TIP3	211	34.015	36.734	78.857	1.00
	0.00								
	ATOM	3285	H2	TIP3	211	34.015	35.532	77.931	1.00
	0.00								
25	ATOM	3286	OH2	TIP3	212	31.242	60.948	81.668	1.00
	37.12								
	ATOM	3287	H1	TIP3	212	31.237	61.895	81.679	1.00
	0.00								
30	ATOM	3288	H2	TIP3	212	31.237	60.693	80.747	1.00
	0.00								
	ATOM	3289	OH2	TIP3	213	35.836	41.528	63.005	1.00
	34.19								
	ATOM	3290	H1	TIP3	213	35.833	42.482	63.033	1.00
	0.00								
35	ATOM	3291	H2	TIP3	213	35.833	41.285	62.095	1.00
	0.00								
	ATOM	3292	OH2	TIP3	214	-2.194	56.331	73.893	1.00
	36.04								
40	ATOM	3293	H1	TIP3	214	-2.249	57.281	73.885	1.00
	0.00								
	ATOM	3294	H2	TIP3	214	-2.249	56.080	72.965	1.00
	0.00								
	ATOM	3295	OH2	TIP3	215	3.099	32.353	85.937	1.00
	36.12								
45	ATOM	3296	H1	TIP3	215	3.140	33.324	85.937	1.00
	0.00								
	ATOM	3297	H2	TIP3	215	3.143	32.141	85.004	1.00
	0.00								
	ATOM	3298	OH2	TIP3	216	29.399	19.525	86.525	1.00
50	25.81								
	ATOM	3299	H1	TIP3	216	29.381	20.462	86.510	1.00
	0.00								
	ATOM	3300	H2	TIP3	216	29.381	19.255	85.591	1.00
	0.00								
55	ATOM	3301	OH2	TIP3	217	1.615	38.832	79.927	1.00
	28.39								
	ATOM	3302	H1	TIP3	217	1.622	39.783	79.929	1.00
	0.00								

	ATOM 0.00	3303	H2	TIP3	217	1.622	38.590	79.001	1.00
	ATOM 34.53	3304	OH2	TIP3	218	13.787	67.375	77.371	1.00
5	ATOM 0.00	3305	H1	TIP3	218	13.615	68.270	77.173	1.00
	ATOM 0.00	3306	H2	TIP3	218	13.746	67.162	76.418	1.00
10	ATOM 32.18	3307	OH2	TIP3	219	6.177	43.017	87.892	1.00
	ATOM 0.00	3308	H1	TIP3	219	6.255	44.059	87.926	1.00
	ATOM 0.00	3309	H2	TIP3	219	6.260	42.938	86.951	1.00
15	ATOM 36.59	3310	OH2	TIP3	220	28.330	71.277	79.038	1.00
	ATOM 0.00	3311	H1	TIP3	220	28.365	72.243	79.051	1.00
20	ATOM 0.00	3312	H2	TIP3	220	28.365	71.051	78.116	1.00
	ATOM 35.46	3313	OH2	TIP3	221	15.295	51.964	90.082	1.00
	ATOM 0.00	3314	H1	TIP3	221	15.297	52.918	90.087	1.00
25	ATOM 0.00	3315	H2	TIP3	221	15.297	51.720	89.159	1.00
	ATOM 39.24	3316	OH2	TIP3	222	42.721	36.930	69.137	1.00
30	ATOM 0.00	3317	H1	TIP3	222	42.697	37.900	69.138	1.00
	ATOM 0.00	3318	H2	TIP3	222	42.697	36.708	68.213	1.00
	ATOM 34.30	3319	OH2	TIP3	223	9.299	64.027	76.973	1.00
35	ATOM 0.00	3320	H1	TIP3	223	9.283	64.978	76.989	1.00
	ATOM 0.00	3321	H2	TIP3	223	9.283	63.775	76.057	1.00
40	ATOM 34.50	3322	OH2	TIP3	224	-2.159	53.009	74.456	1.00
	ATOM 0.00	3323	H1	TIP3	224	-2.107	53.964	74.446	1.00
	ATOM 0.00	3324	H2	TIP3	224	-2.107	52.770	73.521	1.00
45	ATOM 39.25	3325	OH2	TIP3	225	7.927	32.911	69.370	1.00
	ATOM 0.00	3326	H1	TIP3	225	7.900	33.886	69.362	1.00
50	ATOM 0.00	3327	H2	TIP3	225	7.900	32.704	68.435	1.00
	ATOM 37.41	3328	OH2	TIP3	226	35.674	33.002	69.346	1.00
	ATOM 0.00	3329	H1	TIP3	226	35.675	33.963	69.341	1.00
55	ATOM 0.00	3330	H2	TIP3	226	35.675	32.764	68.419	1.00
	ATOM 36.48	3331	OH2	TIP3	227	32.472	17.954	90.113	1.00

5	ATOM 0.00	3332	H1	TIP3	227	32.352	18.828	90.119	1.00
	ATOM 0.00	3333	H2	TIP3	227	32.363	17.557	89.235	1.00
	ATOM 32.84	3334	OH2	TIP3	228	27.207	69.701	74.202	1.00
10	ATOM 0.00	3335	H1	TIP3	228	27.186	70.672	74.165	1.00
	ATOM 0.00	3336	H2	TIP3	228	27.186	69.486	73.249	1.00
	ATOM 37.84	3337	OH2	TIP3	229	27.479	45.093	68.178	1.00
15	ATOM 0.00	3338	H1	TIP3	229	27.483	46.021	68.187	1.00
	ATOM 0.00	3339	H2	TIP3	229	27.483	44.816	67.258	1.00
	ATOM 37.92	3340	OH2	TIP3	230	37.205	56.043	73.914	1.00
20	ATOM 0.00	3341	H1	TIP3	230	37.203	57.002	73.907	1.00
	ATOM 0.00	3342	H2	TIP3	230	37.203	55.806	72.981	1.00
	ATOM 38.85	3343	OH2	TIP3	231	22.304	43.438	86.120	1.00
25	ATOM 0.00	3344	H1	TIP3	231	22.302	44.395	86.117	1.00
	ATOM 0.00	3345	H2	TIP3	231	22.302	43.200	85.191	1.00
	ATOM 35.69	3346	OH2	TIP3	232	38.333	43.976	79.336	1.00
30	ATOM 0.00	3347	H1	TIP3	232	38.328	44.928	79.294	1.00
	ATOM 0.00	3348	H2	TIP3	232	38.328	43.733	78.380	1.00
	ATOM 28.36	3349	OH2	TIP3	233	16.867	67.376	66.645	1.00
35	ATOM 0.00	3350	H1	TIP3	233	16.944	68.314	66.630	1.00
	ATOM 0.00	3351	H2	TIP3	233	16.944	67.108	65.715	1.00
	ATOM 33.63	3352	OH2	TIP3	234	32.553	48.070	81.478	1.00
40	ATOM 0.00	3353	H1	TIP3	234	32.529	49.029	81.495	1.00
	ATOM 0.00	3354	H2	TIP3	234	32.529	47.836	80.558	1.00
	ATOM 31.19	3355	OH2	TIP3	235	12.821	66.088	75.560	1.00
45	ATOM 0.00	3356	H1	TIP3	235	13.007	67.094	75.722	1.00
	ATOM 0.00	3357	H2	TIP3	235	13.078	66.048	74.679	1.00
	ATOM 35.24	3358	OH2	TIP3	236	6.843	46.881	60.307	1.00
50	ATOM 0.00	3359	H1	TIP3	236	6.894	47.835	60.307	1.00
	ATOM 0.00	3360	H2	TIP3	236	6.894	46.639	59.380	1.00

	ATOM 38.31	3361	OH2	TIP3	237	4.319	36.931	69.617	1.00
	ATOM 0.00	3362	H1	TIP3	237	4.340	37.876	69.583	1.00
5	ATOM 0.00	3363	H2	TIP3	237	4.340	36.678	68.670	1.00
	ATOM 35.68	3364	OH2	TIP3	238	31.461	33.832	65.405	1.00
10	ATOM 0.00	3365	H1	TIP3	238	31.412	34.791	65.419	1.00
	ATOM 0.00	3366	H2	TIP3	238	31.412	33.596	64.486	1.00
	ATOM 25.00	3367	OH2	TIP3	239	39.307	48.339	75.826	1.00
15	ATOM 0.00	3368	H1	TIP3	239	39.273	49.294	75.832	1.00
	ATOM 0.00	3369	H2	TIP3	239	39.273	48.095	74.910	1.00
	ATOM 36.62	3370	OH2	TIP3	240	32.144	39.954	63.110	1.00
20	ATOM 0.00	3371	H1	TIP3	240	32.196	40.964	63.098	1.00
	ATOM 0.00	3372	H2	TIP3	240	32.207	39.809	62.162	1.00
25	ATOM 38.61	3373	OH2	TIP3	241	38.953	39.819	77.372	1.00
	ATOM 0.00	3374	H1	TIP3	241	39.606	40.583	77.578	1.00
30	ATOM 0.00	3375	H2	TIP3	241	39.646	39.550	76.745	1.00
	ATOM 38.18	3376	OH2	TIP3	242	27.548	59.716	72.066	1.00
	ATOM 0.00	3377	H1	TIP3	242	27.587	60.647	71.978	1.00
35	ATOM 0.00	3378	H2	TIP3	242	27.512	59.450	71.210	1.00
	ATOM 34.40	3379	OH2	TIP3	243	23.904	22.756	95.445	1.00
40	ATOM 0.00	3380	H1	TIP3	243	23.928	23.706	95.440	1.00
	ATOM 0.00	3381	H2	TIP3	243	23.926	22.505	94.522	1.00
	ATOM 32.40	3382	OH2	TIP3	244	19.269	30.245	72.706	1.00
45	ATOM 0.00	3383	H1	TIP3	244	19.258	31.201	72.720	1.00
	ATOM 0.00	3384	H2	TIP3	244	19.256	30.019	71.792	1.00
50	ATOM 34.70	3385	OH2	TIP3	245	0.514	53.634	68.623	1.00
	ATOM 0.00	3386	H1	TIP3	245	0.583	54.583	68.603	1.00
	ATOM 0.00	3387	H2	TIP3	245	0.583	53.384	67.682	1.00
55	ATOM 28.93	3388	OH2	TIP3	246	13.727	42.324	91.224	1.00
	ATOM 0.00	3389	H1	TIP3	246	13.734	43.285	91.219	1.00

	ATOM 0.00	3390	H2	TIP3	246	13.734	42.085	90.295	1.00
	ATOM 35.21	3391	OH2	TIP3	247	12.121	26.078	76.245	1.00
5	ATOM 0.00	3392	H1	TIP3	247	12.115	27.032	76.248	1.00
	ATOM 0.00	3393	H2	TIP3	247	12.115	25.828	75.321	1.00
10	ATOM 41.37	3394	OH2	TIP3	248	26.635	27.093	75.402	1.00
	ATOM 0.00	3395	H1	TIP3	248	26.936	27.361	76.195	1.00
	ATOM 0.00	3396	H2	TIP3	248	26.916	26.154	75.197	1.00
15	ATOM 34.61	3397	OH2	TIP3	249	4.453	30.792	80.479	1.00
	ATOM 0.00	3398	H1	TIP3	249	4.440	31.767	80.478	1.00
	ATOM 0.00	3399	H2	TIP3	249	4.440	30.581	79.550	1.00
20	ATOM 34.69	3400	OH2	TIP3	250	10.746	21.117	93.065	1.00
	ATOM 0.00	3401	H1	TIP3	250	10.882	22.015	93.131	1.00
25	ATOM 0.00	3402	H2	TIP3	250	10.869	20.735	92.219	1.00
	ATOM 39.18	3403	OH2	TIP3	251	10.306	56.959	61.376	1.00
30	ATOM 0.00	3404	H1	TIP3	251	10.344	57.906	61.368	1.00
	ATOM 0.00	3405	H2	TIP3	251	10.344	56.703	60.446	1.00
	ATOM 30.45	3406	OH2	TIP3	252	19.639	44.893	88.642	1.00
35	ATOM 0.00	3407	H1	TIP3	252	19.629	45.858	88.629	1.00
	ATOM 0.00	3408	H2	TIP3	252	19.629	44.668	87.710	1.00
40	ATOM 34.86	3409	OH2	TIP3	253	15.407	18.715	83.978	1.00
	ATOM 0.00	3410	H1	TIP3	253	15.292	19.676	83.830	1.00
	ATOM 0.00	3411	H2	TIP3	253	15.355	18.477	83.021	1.00
45	ATOM 31.02	3412	OH2	TIP3	254	9.191	21.414	89.085	1.00
	ATOM 0.00	3413	H1	TIP3	254	9.127	22.355	89.110	1.00
50	ATOM 0.00	3414	H2	TIP3	254	9.127	21.152	88.178	1.00
	ATOM 35.28	3415	OH2	TIP3	255	7.949	25.146	81.387	1.00
	ATOM 0.00	3416	H1	TIP3	255	8.094	26.095	81.404	1.00
55	ATOM 0.00	3417	H2	TIP3	255	8.095	24.899	80.472	1.00
	ATOM 35.59	3418	OH2	TIP3	256	34.958	38.845	65.354	1.00

	ATOM 0.00	3419	H1	TIP3	256	35.003	39.804	65.364	1.00
	ATOM 0.00	3420	H2	TIP3	256	35.003	38.611	64.433	1.00
5	ATOM 8.88	3421	S	SO4	901	20.174	32.731	69.351	1.00
	ATOM 8.66	3422	O1	SO4	901	19.784	32.048	70.522	1.00
10	ATOM 9.59	3423	O2	SO4	901	19.008	33.195	68.633	1.00
	ATOM 8.42	3424	O3	SO4	901	20.991	33.872	69.811	1.00
	ATOM 7.06	3425	O4	SO4	901	20.949	31.837	68.511	1.00
15	ATOM 27.67	3426	S	SO4	902	39.464	37.832	73.382	1.00
	ATOM 28.54	3427	O1	SO4	902	38.570	36.649	73.306	1.00
20	ATOM 26.97	3428	O2	SO4	902	40.301	37.833	72.264	1.00
	ATOM 26.59	3429	O3	SO4	902	38.647	39.016	73.378	1.00
	ATOM 27.31	3430	O4	SO4	902	40.168	37.757	74.605	1.00
25	ATOM 38.89	3431	S	SO4	903	14.908	66.477	81.070	1.00
	ATOM 39.87	3432	O1	SO4	903	14.636	65.291	80.341	1.00
30	ATOM 36.71	3433	O2	SO4	903	13.849	67.449	80.942	1.00
	ATOM 37.21	3434	O3	SO4	903	15.068	66.086	82.452	1.00
	ATOM 37.74	3435	O4	SO4	903	16.095	67.021	80.519	1.00
35	ATOM 36.02	3436	PA	ANP	1	24.843	41.888	87.844	1.00
	ATOM 36.27	3437	O1A	ANP	1	25.011	41.910	89.325	1.00
40	ATOM 35.82	3438	O2A	ANP	1	23.696	41.181	87.286	1.00
	ATOM 33.31	3439	O5'	ANP	1	26.156	41.369	87.121	1.00
	ATOM 39.59	3440	PB	ANP	1	25.987	44.266	86.647	1.00
45	ATOM 38.23	3441	O1B	ANP	1	25.401	45.114	85.567	1.00
	ATOM 38.97	3442	O2B	ANP	1	27.095	43.375	86.202	1.00
50	ATOM 37.26	3443	O3A	ANP	1	24.871	43.380	87.281	1.00
	ATOM 39.82	3444	N3B	ANP	1	26.461	45.182	87.959	1.00
	ATOM 26.07	3445	C5'	ANP	1	26.998	40.244	87.427	1.00
55	ATOM 22.40	3446	C4'	ANP	1	28.014	39.742	86.376	1.00
	ATOM 19.19	3447	O4'	ANP	1	27.341	38.582	85.846	1.00

	ATOM	3448	C1'	ANP	1	27.387	38.523	84.444	1.00
	16.95								
	ATOM	3449	N9	ANP	1	26.155	37.856	84.043	1.00
	13.25								
5	ATOM	3450	C4	ANP	1	26.003	36.800	83.169	1.00
	12.39								
	ATOM	3451	N3	ANP	1	26.965	36.131	82.438	1.00
	12.21								
10	ATOM	3452	C2	ANP	1	26.415	35.218	81.670	1.00
	11.33								
	ATOM	3453	N1	ANP	1	25.126	34.826	81.608	1.00
	10.92								
	ATOM	3454	C6	ANP	1	24.208	35.502	82.313	1.00
	11.51								
15	ATOM	3455	N6	ANP	1	22.907	35.158	82.165	1.00
	11.52								
	ATOM	3456	C5	ANP	1	24.660	36.530	83.164	1.00
	11.58								
	ATOM	3457	N7	ANP	1	23.970	37.331	84.013	1.00
	12.95								
20	ATOM	3458	C8	ANP	1	24.912	38.111	84.535	1.00
	13.45								
	ATOM	3459	C2'	ANP	1	27.341	39.966	84.103	1.00
	19.66								
25	ATOM	3460	O2'	ANP	1	27.631	40.027	82.675	1.00
	20.41								
	ATOM	3461	C3'	ANP	1	28.385	40.520	85.098	1.00
	20.48								
30	ATOM	3462	O3'	ANP	1	29.565	40.300	84.242	1.00
	22.85								
	ATOM	3463	C1	DTT	1	17.791	37.806	84.959	1.00
	22.39								
	ATOM	3464	C2	DTT	1	17.633	38.191	83.500	1.00
	23.33								
35	ATOM	3465	O3	DTT	1	18.918	38.534	82.973	1.00
	22.44								
	ATOM	3466	O6	DTT	1	18.197	38.939	85.755	1.00
	24.18								
40	END								



Table 4  
Coordinates of Lck bound with staurosporine (soaked)

5		B	Atom			X	Y	Z	Occ
			Type	Res	#				
	ATOM	1	CB	LYS	231	1.760	26.587	89.190	1.00
	18.15								
10	ATOM	2	CG	LYS	231	0.804	26.486	88.016	1.00
	19.78								
	ATOM	3	CD	LYS	231	1.297	25.440	87.044	1.00
	21.94								
15	ATOM	4	CE	LYS	231	0.737	25.667	85.678	1.00
	21.71								
	ATOM	5	NZ	LYS	231	1.363	24.735	84.727	1.00
	25.80								
	ATOM	9	C	LYS	231	2.208	27.249	91.505	1.00
	16.44								
20	ATOM	10	O	LYS	231	3.298	27.799	91.498	1.00
	16.57								
	ATOM	13	N	LYS	231	1.232	28.896	89.968	1.00
	18.23								
25	ATOM	15	CA	LYS	231	1.255	27.440	90.349	1.00
	17.63								
	ATOM	16	N	PRO	232	1.814	26.446	92.511	1.00
	16.47								
	ATOM	17	CD	PRO	232	0.580	25.644	92.633	1.00
	16.83								
30	ATOM	18	CA	PRO	232	2.697	26.208	93.656	1.00
	15.75								
	ATOM	19	CB	PRO	232	1.854	25.276	94.530	1.00
	16.74								
35	ATOM	20	CG	PRO	232	1.031	24.515	93.519	1.00
	16.11								
	ATOM	21	C	PRO	232	3.957	25.516	93.146	1.00
	15.08								
	ATOM	22	O	PRO	232	3.914	24.803	92.155	1.00
	11.56								
40	ATOM	23	N	TRP	233	5.061	25.660	93.878	1.00
	14.93								
	ATOM	25	CA	TRP	233	6.315	25.098	93.442	1.00
	15.30								
45	ATOM	26	CB	TRP	233	7.432	25.348	94.482	1.00
	16.73								
	ATOM	27	CG	TRP	233	7.278	24.559	95.770	1.00
	15.82								
	ATOM	28	CD2	TRP	233	7.695	23.204	96.006	1.00
	16.47								
50	ATOM	29	CE2	TRP	233	7.336	22.873	97.331	1.00
	16.40								
	ATOM	30	CE3	TRP	233	8.344	22.232	95.222	1.00
	16.08								
55	ATOM	31	CD1	TRP	233	6.707	24.989	96.926	1.00
	15.21								
	ATOM	32	NE1	TRP	233	6.741	23.982	97.877	1.00
	15.51								
	ATOM	34	C22	TRP	233	7.590	21.615	97.898	1.00
	17.54								

	ATOM 16.04	35	CZ3	TRP	233	8.600	20.980	95.785	1.00
	ATOM 17.08	36	CH2	TRP	233	8.217	20.684	97.112	1.00
5	ATOM 15.78	37	C	TRP	233	6.272	23.631	93.062	1.00
	ATOM 16.43	38	O	TRP	233	6.950	23.237	92.114	1.00
10	ATOM 14.38	39	N	TRP	234	5.431	22.844	93.739	1.00
	ATOM 15.29	41	CA	TRP	234	5.354	21.401	93.463	1.00
	ATOM 13.76	42	CB	TRP	234	4.686	20.603	94.620	1.00
15	ATOM 11.08	43	CG	TRP	234	3.293	21.032	94.983	1.00
	ATOM 12.03	44	CD2	TRP	234	2.904	21.976	96.002	1.00
20	ATOM 11.40	45	CE2	TRP	234	1.497	22.087	95.950	1.00
	ATOM 13.92	46	CE3	TRP	234	3.610	22.756	96.923	1.00
	ATOM 12.07	47	CD1	TRP	234	2.146	20.610	94.399	1.00
25	ATOM 11.51	48	NE1	TRP	234	1.067	21.234	94.965	1.00
	ATOM 13.55	50	CZ2	TRP	234	0.765	22.914	96.804	1.00
30	ATOM 14.90	51	CZ3	TRP	234	2.886	23.596	97.785	1.00
	ATOM 13.08	52	CH2	TRP	234	1.464	23.677	97.705	1.00
	ATOM 15.90	53	C	TRP	234	4.718	21.054	92.135	1.00
35	ATOM 15.35	54	O	TRP	234	4.763	19.905	91.708	1.00
	ATOM 16.06	55	N	GLU	235	4.076	22.030	91.508	1.00
40	ATOM 17.45	57	CA	GLU	235	3.483	21.823	90.182	1.00
	ATOM 18.24	58	CB	GLU	235	1.978	22.133	90.187	1.00
	ATOM 20.36	59	CG	GLU	235	1.124	21.155	90.988	1.00
45	ATOM 23.76	60	CD	GLU	235	-0.372	21.423	90.895	1.00
	ATOM 25.31	61	OE1	GLU	235	-0.814	22.410	90.254	1.00
50	ATOM 23.55	62	OE2	GLU	235	-1.122	20.611	91.457	1.00
	ATOM 17.15	63	C	GLU	235	4.134	22.720	89.138	1.00
	ATOM 18.56	64	O	GLU	235	3.820	22.648	87.952	1.00
55	ATOM 16.90	65	N	ASP	236	4.949	23.646	89.619	1.00
	ATOM 15.75	67	CA	ASP	236	5.608	24.611	88.736	1.00

	ATOM 16.17	68	CB	ASP	236	6.242	25.697	89.608	1.00
	ATOM 18.56	69	CG	ASP	236	6.798	26.867	88.800	1.00
5	ATOM 17.21	70	OD1	ASP	236	6.726	26.899	87.570	1.00
	ATOM 19.46	71	OD2	ASP	236	7.326	27.820	89.384	1.00
10	ATOM 15.80	72	C	ASP	236	6.651	23.950	87.841	1.00
	ATOM 13.78	73	O	ASP	236	7.690	23.480	88.298	1.00
	ATOM 14.20	74	N	ALA	237	6.393	23.961	86.543	1.00
15	ATOM 15.78	76	CA	ALA	237	7.356	23.384	85.605	1.00
	ATOM 15.97	77	CB	ALA	237	6.829	23.514	84.163	1.00
20	ATOM 14.92	78	C	ALA	237	8.752	24.012	85.721	1.00
	ATOM 14.31	79	O	ALA	237	9.723	23.383	85.391	1.00
	ATOM 12.87	80	N	TRP	238	8.840	25.236	86.253	1.00
25	ATOM 13.04	82	CA	TRP	238	10.129	25.922	86.425	1.00
	ATOM 15.24	83	CB	TRP	238	9.954	27.442	86.287	1.00
30	ATOM 20.51	84	CG	TRP	238	10.073	27.900	84.882	1.00
	ATOM 22.57	85	CD2	TRP	238	9.031	28.268	84.008	1.00
	ATOM 23.44	86	CE2	TRP	238	9.588	28.593	82.759	1.00
35	ATOM 23.00	87	CE3	TRP	238	7.634	28.388	84.155	1.00
	ATOM 19.47	88	CD1	TRP	238	11.235	28.000	84.145	1.00
40	ATOM 21.43	89	NE1	TRP	238	10.968	28.401	82.876	1.00
	ATOM 24.52	91	CZ2	TRP	238	8.864	28.997	81.674	1.00
	ATOM 25.91	92	CZ3	TRP	238	6.907	28.782	83.099	1.00
45	ATOM 27.33	93	CH2	TRP	238	7.506	29.101	81.866	1.00
	ATOM 12.20	94	C	TRP	238	10.953	25.631	87.693	1.00
50	ATOM 12.35	95	O	TRP	238	12.176	25.908	87.733	1.00
	ATOM 10.34	96	N	GLU	239	10.315	25.146	88.747	1.00
	ATOM 10.08	98	CA	GLU	239	11.049	24.844	89.979	1.00
55	ATOM 9.78	99	CB	GLU	239	10.073	24.461	91.128	1.00
	ATOM 11.32	100	CG	GLU	239	10.736	24.336	92.513	1.00

	ATOM 11.67	101	CD	GLU	239	10.896	25.689	93.246	1.00
	ATOM 11.98	102	OE1	GLU	239	10.190	26.651	92.913	1.00
5	ATOM 13.38	103	OE2	GLU	239	11.718	25.788	94.189	1.00
	ATOM 9.39	104	C	GLU	239	12.012	23.677	89.790	1.00
10	ATOM 10.05	105	O	GLU	239	11.657	22.701	89.136	1.00
	ATOM 9.86	106	N	VAL	240	13.243	23.818	90.267	1.00
	ATOM 10.68	108	CA	VAL	240	14.189	22.719	90.244	1.00
15	ATOM 12.91	109	CB	VAL	240	15.369	22.907	89.192	1.00
	ATOM 13.06	110	CG1	VAL	240	14.833	22.947	87.766	1.00
	ATOM 12.60	111	CG2	VAL	240	16.212	24.189	89.520	1.00
20	ATOM 12.37	112	C	VAL	240	14.832	22.564	91.629	1.00
	ATOM 11.55	113	O	VAL	240	15.017	23.557	92.355	1.00
25	ATOM 12.09	114	N	PRO	241	15.155	21.317	92.027	1.00
	ATOM 12.63	115	CD	PRO	241	14.718	20.058	91.401	1.00
	ATOM 12.13	116	CA	PRO	241	15.799	21.069	93.321	1.00
30	ATOM 12.25	117	CB	PRO	241	15.978	19.546	93.314	1.00
	ATOM 14.30	118	CG	PRO	241	14.760	19.070	92.581	1.00
35	ATOM 12.10	119	C	PRO	241	17.156	21.771	93.244	1.00
	ATOM 8.60	120	O	PRO	241	17.823	21.782	92.183	1.00
	ATOM 11.24	121	N	ARG	242	17.579	22.372	94.352	1.00
40	ATOM 13.70	123	CA	ARG	242	18.835	23.085	94.383	1.00
	ATOM 14.96	124	CB	ARG	242	18.987	23.859	95.694	1.00
45	ATOM 21.92	125	CG	ARG	242	20.154	24.871	95.692	1.00
	ATOM 26.26	126	CD	ARG	242	20.611	25.208	97.126	1.00
	ATOM 31.84	127	NE	ARG	242	19.454	25.535	97.957	1.00
50	ATOM 31.27	129	CZ	ARG	242	18.881	26.725	97.964	1.00
	ATOM 33.78	130	NH1	ARG	242	19.384	27.680	97.214	1.00
55	ATOM 34.79	133	NH2	ARG	242	17.727	26.903	98.588	1.00
	ATOM 14.87	136	C	ARG	242	20.053	22.179	94.124	1.00

	ATOM 13.69	137	O	ARG	242	21.111	22.641	93.681	1.00
	ATOM 12.60	138	N	GLU	243	19.852	20.878	94.327	1.00
5	ATOM 15.16	140	CA	GLU	243	20.879	19.857	94.087	1.00
	ATOM 15.64	141	CB	GLU	243	20.359	18.482	94.537	1.00
10	ATOM 21.87	142	CG	GLU	243	20.243	18.312	96.035	1.00
	ATOM 24.48	143	CD	GLU	243	19.087	19.087	96.647	1.00
	ATOM 24.61	144	OE1	GLU	243	18.067	19.266	95.960	1.00
15	ATOM 27.96	145	OE2	GLU	243	19.190	19.482	97.840	1.00
	ATOM 14.70	146	C	GLU	243	21.282	19.754	92.604	1.00
20	ATOM 14.38	147	O	GLU	243	22.346	19.229	92.259	1.00
	ATOM 13.51	148	N	THR	244	20.411	20.220	91.718	1.00
	ATOM 12.07	150	CA	THR	244	20.699	20.168	90.280	1.00
25	ATOM 10.75	151	CB	THR	244	19.385	20.374	89.418	1.00
	ATOM 10.55	152	OG1	THR	244	18.888	21.707	89.565	1.00
30	ATOM 13.15	154	CG2	THR	244	18.290	19.402	89.858	1.00
	ATOM 10.76	155	C	THR	244	21.760	21.199	89.833	1.00
	ATOM 10.97	156	O	THR	244	22.269	21.168	88.705	1.00
35	ATOM 8.88	157	N	LEU	245	22.148	22.077	90.746	1.00
	ATOM 9.31	159	CA	LEU	245	23.061	23.165	90.379	1.00
40	ATOM 10.49	160	CB	LEU	245	22.368	24.506	90.651	1.00
	ATOM 11.43	161	CG	LEU	245	20.914	24.742	90.150	1.00
	ATOM 13.57	162	CD1	LEU	245	20.382	26.019	90.797	1.00
45	ATOM 11.87	163	CD2	LEU	245	20.877	24.853	88.650	1.00
	ATOM 10.95	164	C	LEU	245	24.393	23.193	91.083	1.00
50	ATOM 9.05	165	O	LEU	245	24.495	22.971	92.300	1.00
	ATOM 10.85	166	N	LYS	246	25.416	23.518	90.317	1.00
	ATOM 13.86	168	CA	LYS	246	26.762	23.622	90.837	1.00
55	ATOM 15.07	169	CB	LYS	246	27.611	22.471	90.288	1.00
	ATOM 22.47	170	CG	LYS	246	29.054	22.496	90.773	1.00

5	ATOM 27.84	171	CD	LYS	246	29.873	21.474	89.971	1.00
	ATOM 30.47	172	CE	LYS	246	31.201	21.130	90.636	1.00
	ATOM 34.63	173	NZ	LYS	246	31.003	20.227	91.823	1.00
10	ATOM 12.07	177	C	LYS	246	27.311	24.958	90.362	1.00
	ATOM 14.04	178	O	LYS	246	27.438	25.151	89.148	1.00
	ATOM 10.03	179	N	LEU	247	27.550	25.878	91.299	0.60
15	ATOM 10.15	181	CA	LEU	247	28.062	27.225	91.030	0.60
	ATOM 9.32	182	CB	LEU	247	27.574	28.203	92.116	0.60
	ATOM 10.50	183	CG	LEU	247	26.175	28.846	92.001	0.60
20	ATOM 10.50	184	CD1	LEU	247	25.107	27.817	91.828	0.60
	ATOM 10.58	185	CD2	LEU	247	25.882	29.702	93.248	0.60
	ATOM 10.90	186	C	LEU	247	29.587	27.226	90.925	0.60
25	ATOM 9.54	187	O	LEU	247	30.281	26.783	91.830	0.60
	ATOM 12.69	188	N	VAL	248	30.106	27.705	89.803	1.00
	ATOM 15.63	190	CA	VAL	248	31.547	27.639	89.569	1.00
30	ATOM 16.91	191	CB	VAL	248	31.834	26.802	88.298	1.00
	ATOM 18.84	192	CG1	VAL	248	33.337	26.609	88.100	1.00
	ATOM 15.03	193	CG2	VAL	248	31.163	25.438	88.418	1.00
35	ATOM 16.65	194	C	VAL	248	32.328	28.947	89.556	1.00
	ATOM 19.01	195	O	VAL	248	33.435	28.985	90.045	1.00
	ATOM 16.72	196	N	GLU	249	31.759	30.034	89.046	1.00
40	ATOM 16.72	198	CA	GLU	249	32.487	31.279	88.985	1.00
	ATOM 20.55	199	CB	GLU	249	33.278	31.332	87.659	1.00
	ATOM 26.95	200	CG	GLU	249	34.366	32.418	87.599	1.00
45	ATOM 29.78	201	CD	GLU	249	34.777	32.796	86.158	1.00
	ATOM 32.71	202	OE1	GLU	249	34.916	31.893	85.301	1.00
	ATOM 31.08	203	OE2	GLU	249	34.963	34.003	85.879	1.00
50	ATOM 16.18	204	C	GLU	249	31.556	32.484	89.066	1.00
	ATOM 14.44	205	O	GLU	249	30.524	32.519	88.422	1.00

	ATOM 14.75	206	N	ARG	250	31.958	33.498	89.826	1.00
	ATOM 16.31	208	CA	ARG	250	31.149	34.697	89.970	1.00
5	ATOM 18.34	209	CB	ARG	250	31.586	35.481	91.206	1.00
	ATOM 24.42	210	CG	ARG	250	30.578	36.542	91.602	1.00
10	ATOM 29.12	211	CD	ARG	250	30.650	36.833	93.108	1.00
	ATOM 34.21	212	NE	ARG	250	32.020	37.004	93.581	1.00
	ATOM 38.12	214	CZ	ARG	250	32.474	36.540	94.752	1.00
15	ATOM 38.43	215	NH1	ARG	250	31.658	35.886	95.591	1.00
	ATOM 38.12	218	NH2	ARG	250	33.760	36.673	95.064	1.00
20	ATOM 13.14	221	C	ARG	250	31.216	35.590	88.737	1.00
	ATOM 13.08	222	O	ARG	250	32.285	35.858	88.232	1.00
	ATOM 12.68	223	N	LEU	251	30.062	35.972	88.205	1.00
25	ATOM 20.00	224	H	LEU	251	29.248	35.608	88.573	1.00
	ATOM 11.57	225	CA	LEU	251	30.012	36.833	87.024	1.00
30	ATOM 10.45	226	CB	LEU	251	28.920	36.356	86.071	1.00
	ATOM 10.47	227	CG	LEU	251	29.000	34.881	85.622	1.00
	ATOM 10.51	228	CD1	LEU	251	27.692	34.513	84.926	1.00
35	ATOM 9.63	229	CD2	LEU	251	30.194	34.549	84.674	1.00
	ATOM 12.84	230	C	LEU	251	29.757	38.290	87.354	1.00
40	ATOM 12.85	231	O	LEU	251	30.110	39.141	86.586	1.00
	ATOM 14.06	232	N	GLY	252	29.043	38.534	88.454	1.00
	ATOM 16.48	234	CA	GLY	252	28.697	39.889	88.879	1.00
45	ATOM 18.50	235	C	GLY	252	28.247	39.871	90.337	1.00
	ATOM 18.48	236	O	GLY	252	27.860	38.831	90.871	1.00
50	ATOM 20.36	237	N	ALA	253	28.377	40.997	91.032	1.00
	ATOM 22.25	239	CA	ALA	253	27.977	41.046	92.430	1.00
	ATOM 22.29	240	CB	ALA	253	29.170	40.793	93.359	1.00
55	ATOM 24.41	241	C	ALA	253	27.333	42.364	92.753	1.00
	ATOM 25.47	242	O	ALA	253	27.654	43.386	92.154	1.00

	ATOM 24.62	243	N	GLY	254	26.457	42.365	93.744	1.00
	ATOM 25.95	245	CA	GLY	254	25.782	43.592	94.068	1.00
5	ATOM 25.48	246	C	GLY	254	25.166	43.611	95.431	1.00
	ATOM 25.92	247	O	GLY	254	25.350	42.700	96.222	1.00
10	ATOM 26.31	248	N	GLN	255	24.527	44.737	95.722	1.00
	ATOM 26.64	250	CA	GLN	255	23.874	44.957	96.998	1.00
	ATOM 29.75	251	CB	GLN	255	23.446	46.419	97.064	1.00
15	ATOM 34.10	252	CG	GLN	255	22.747	46.856	98.322	1.00
	ATOM 36.38	253	CD	GLN	255	22.017	48.171	98.121	1.00
20	ATOM 38.79	254	OE1	GLN	255	21.131	48.519	98.905	1.00
	ATOM 36.30	255	NE2	GLN	255	22.362	48.896	97.053	1.00
	ATOM 25.12	258	C	GLN	255	22.682	44.026	97.195	1.00
25	ATOM 25.75	259	O	GLN	255	22.359	43.641	98.325	1.00
	ATOM 22.09	260	N	ALA	256	22.090	43.594	96.077	1.00
30	ATOM 20.00	261	H	ALA	256	22.487	43.881	95.233	1.00
	ATOM 21.90	262	CA	ALA	256	20.935	42.685	96.077	1.00
	ATOM 20.60	263	CB	ALA	256	19.911	43.108	94.982	1.00
35	ATOM 19.44	264	C	ALA	256	21.291	41.210	95.867	1.00
	ATOM 15.55	265	O	ALA	256	20.440	40.347	95.964	1.00
40	ATOM 18.47	266	N	GLY	257	22.552	40.934	95.517	1.00
	ATOM 16.24	268	CA	GLY	257	22.937	39.558	95.310	1.00
	ATOM 15.18	269	C	GLY	257	24.099	39.430	94.354	1.00
45	ATOM 13.21	270	O	GLY	257	24.812	40.409	94.037	1.00
	ATOM 13.24	271	N	GLU	258	24.241	38.212	93.832	1.00
50	ATOM 13.69	273	CA	GLU	258	25.292	37.891	92.911	1.00
	ATOM 14.93	274	CB	GLU	258	26.321	37.003	93.639	1.00
	ATOM 19.82	275	CG	GLU	258	26.843	37.599	94.953	1.00
55	ATOM 21.99	276	CD	GLU	258	28.028	36.822	95.491	1.00
	ATOM 22.59	277	OE1	GLU	258	27.927	35.579	95.638	1.00



	ATOM 23.01	278	OE2	GLU	258	29.072	37.457	95.699	1.00
	ATOM 12.11	279	C	GLU	258	24.742	37.130	91.709	1.00
5	ATOM 12.35	280	O	GLU	258	23.557	36.707	91.717	1.00
	ATOM 9.59	281	N	VAL	259	25.577	36.995	90.694	1.00
10	ATOM 20.00	282	H	VAL	259	26.474	37.374	90.786	1.00
	ATOM 10.11	283	CA	VAL	259	25.275	36.217	89.519	1.00
	ATOM 11.85	284	CB	VAL	259	24.980	37.045	88.216	1.00
15	ATOM 9.66	285	CG1	VAL	259	24.607	36.055	87.038	1.00
	ATOM 10.23	286	CG2	VAL	259	23.823	38.034	88.430	1.00
20	ATOM 10.60	287	C	VAL	259	26.500	35.388	89.299	1.00
	ATOM 10.25	288	O	VAL	259	27.644	35.919	89.313	1.00
	ATOM 9.34	289	N	TRP	260	26.279	34.089	89.199	1.00
25	ATOM 9.50	291	CA	TRP	260	27.307	33.090	89.022	1.00
	ATOM 10.92	292	CB	TRP	260	27.269	32.103	90.194	1.00
30	ATOM 12.43	293	CG	TRP	260	27.761	32.642	91.486	1.00
	ATOM 12.30	294	CD2	TRP	260	29.008	32.329	92.089	1.00
	ATOM 14.82	295	CE2	TRP	260	29.119	33.128	93.248	1.00
35	ATOM 14.96	296	CE3	TRP	260	30.071	31.488	91.758	1.00
	ATOM 13.18	297	CD1	TRP	260	27.135	33.529	92.281	1.00
40	ATOM 17.08	298	NE1	TRP	260	27.947	33.832	93.362	1.00
	ATOM 17.64	300	CZ2	TRP	260	30.238	33.081	94.093	1.00
	ATOM 16.99	301	CZ3	TRP	260	31.199	31.429	92.613	1.00
45	ATOM 14.69	302	CH2	TRP	260	31.273	32.246	93.745	1.00
	ATOM 9.88	303	C	TRP	260	27.080	32.231	87.800	1.00
50	ATOM 8.95	304	O	TRP	260	25.944	31.967	87.419	1.00
	ATOM 8.87	305	N	MET	261	28.163	31.821	87.161	1.00
	ATOM 10.46	307	CA	MET	261	28.038	30.878	86.085	1.00
55	ATOM 12.42	308	CB	MET	261	29.247	30.988	85.136	1.00
	ATOM 16.57	309	CG	MET	261	29.262	29.954	83.987	1.00

	ATOM 22.32	310	SD	MET	261	30.294	28.517	84.361	1.00
	ATOM 23.08	311	CE	MET	261	29.294	27.235	83.989	1.00
5	ATOM 9.83	312	C	MET	261	28.056	29.525	86.781	1.00
	ATOM 9.64	313	O	MET	261	28.834	29.330	87.742	1.00
10	ATOM 8.72	314	N	GLY	262	27.208	28.607	86.341	1.00
	ATOM 11.89	316	CA	GLY	262	27.166	27.301	86.966	1.00
	ATOM 10.57	317	C	GLY	262	26.724	26.246	85.969	1.00
15	ATOM 9.80	318	O	GLY	262	26.624	26.513	84.758	1.00
	ATOM 9.01	319	N	TYR	263	26.497	25.042	86.465	1.00
20	ATOM 11.02	321	CA	TYR	263	26.035	23.960	85.621	1.00
	ATOM 12.51	322	CB	TYR	263	27.097	22.855	85.485	1.00
	ATOM 14.55	323	CG	TYR	263	28.293	23.213	84.655	1.00
25	ATOM 18.08	324	CD1	TYR	263	29.438	23.724	85.239	1.00
	ATOM 20.09	325	CE1	TYR	263	30.546	24.079	84.461	1.00
30	ATOM 18.00	326	CD2	TYR	263	28.269	23.049	83.277	1.00
	ATOM 19.77	327	CE2	TYR	263	29.333	23.398	82.502	1.00
	ATOM 21.42	328	CZ	TYR	263	30.472	23.907	83.085	1.00
35	ATOM 23.89	329	OH	TYR	263	31.509	24.270	82.257	1.00
	ATOM 10.30	331	C	TYR	263	24.802	23.330	86.196	1.00
40	ATOM 9.29	332	O	TYR	263	24.747	23.067	87.393	1.00
	ATOM 9.14	333	N	TYR	264	23.829	23.092	85.327	1.00
	ATOM 9.25	335	CA	TYR	264	22.598	22.418	85.668	1.00
45	ATOM 8.14	336	CB	TYR	264	21.389	23.039	84.904	1.00
	ATOM 8.30	337	CG	TYR	264	20.125	22.250	85.107	1.00
50	ATOM 9.38	338	CD1	TYR	264	19.414	22.336	86.296	1.00
	ATOM 10.86	339	CE1	TYR	264	18.277	21.535	86.521	1.00
	ATOM 10.42	340	CD2	TYR	264	19.660	21.345	84.113	1.00
55	ATOM 11.07	341	CE2	TYR	264	18.504	20.541	84.338	1.00
	ATOM 11.93	342	CZ	TYR	264	17.818	20.667	85.546	1.00

	ATOM 12.25	343	OH	TYR	264	16.644	19.967	85.764	1.00
	ATOM 7.93	345	C	TYR	264	22.755	20.991	85.244	1.00
5	ATOM 7.75	346	O	TYR	264	23.097	20.730	84.084	1.00
	ATOM 8.78	347	N	ASN	265	22.556	20.068	86.177	1.00
10	ATOM 7.73	349	CA	ASN	265	22.656	18.630	85.940	1.00
	ATOM 9.37	350	CB	ASN	265	21.432	18.107	85.138	1.00
	ATOM 10.68	351	CG	ASN	265	20.195	17.820	86.027	1.00
15	ATOM 14.15	352	OD1	ASN	265	19.201	17.236	85.555	1.00
	ATOM 6.80	353	ND2	ASN	265	20.277	18.151	87.295	1.00
20	ATOM 7.98	356	C	ASN	265	23.976	18.213	85.297	1.00
	ATOM 7.72	357	O	ASN	265	24.000	17.505	84.261	1.00
	ATOM 6.07	358	N	GLY	266	25.043	18.836	85.810	1.00
25	ATOM 7.41	360	CA	GLY	266	26.401	18.561	85.350	1.00
	ATOM 7.01	361	C	GLY	266	26.851	19.058	83.986	1.00
30	ATOM 9.23	362	O	GLY	266	27.974	19.487	83.871	1.00
	ATOM 2.00	363	N	HIS	267	25.968	19.138	83.003	0.49
	ATOM 2.00	365	CA	HIS	267	26.385	19.498	81.649	0.49
35	ATOM 2.00	366	CB	HIS	267	25.879	18.404	80.711	0.49
	ATOM 2.00	367	CG	HIS	267	26.427	17.062	81.012	0.49
40	ATOM 2.00	368	CD2	HIS	267	25.850	15.925	81.413	0.49
	ATOM 2.00	369	ND1	HIS	267	27.795	16.791	80.933	0.49
	ATOM 2.00	371	CE1	HIS	267	27.995	15.546	81.278	0.49
45	ATOM 2.00	372	NE2	HIS	267	26.840	14.982	81.578	0.49
	ATOM 2.09	374	C	HIS	267	25.966	20.815	81.027	0.49
50	ATOM 2.00	375	O	HIS	267	26.543	21.266	80.034	0.49
	ATOM 4.73	376	N	THR	268	24.935	21.423	81.586	1.00
	ATOM 20.00	377	H	THR	268	24.525	21.095	82.409	1.00
55	ATOM 5.55	378	CA	THR	268	24.404	22.625	80.944	1.00
	ATOM 7.68	379	CB	THR	268	22.859	22.525	80.846	1.00

	ATOM 9.02	380	OG1	THR	268	22.512	21.310	80.149	1.00
	ATOM 5.22	382	CG2	THR	268	22.274	23.755	80.100	1.00
5	ATOM 6.63	383	C	THR	268	24.803	23.892	81.652	1.00
	ATOM 6.37	384	O	THR	268	24.513	24.093	82.850	1.00
10	ATOM 5.70	385	N	LYS	269	25.546	24.706	80.928	1.00
	ATOM 7.60	387	CA	LYS	269	25.997	25.980	81.437	1.00
	ATOM 11.19	388	CB	LYS	269	27.008	26.557	80.441	1.00
15	ATOM 19.64	389	CG	LYS	269	28.112	27.299	81.092	1.00
	ATOM 24.28	390	CD	LYS	269	29.454	27.141	80.346	1.00
20	ATOM 28.05	391	CE	LYS	269	30.292	28.414	80.570	1.00
	ATOM 29.11	392	NZ	LYS	269	31.712	28.462	80.031	1.00
	ATOM 6.80	396	C	LYS	269	24.835	26.970	81.591	1.00
25	ATOM 4.51	397	O	LYS	269	24.107	27.215	80.617	1.00
	ATOM 4.20	398	N	VAL	270	24.729	27.609	82.759	1.00
30	ATOM 5.51	400	CA	VAL	270	23.665	28.550	83.073	1.00
	ATOM 5.12	401	CB	VAL	270	22.487	27.835	83.862	1.00
	ATOM 5.11	402	CG1	VAL	270	21.848	26.691	83.028	1.00
35	ATOM 4.28	403	CG2	VAL	270	23.005	27.227	85.215	1.00
	ATOM 4.46	404	C	VAL	270	24.196	29.670	83.985	1.00
40	ATOM 5.70	405	O	VAL	270	25.323	29.602	84.495	1.00
	ATOM 4.49	406	N	ALA	271	23.427	30.735	84.117	1.00
	ATOM 5.32	408	CA	ALA	271	23.749	31.844	85.016	1.00
45	ATOM 5.88	409	CB	ALA	271	23.510	33.201	84.315	1.00
	ATOM 6.25	410	C	ALA	271	22.807	31.730	86.169	1.00
50	ATOM 6.40	411	O	ALA	271	21.619	31.496	85.963	1.00
	ATOM 7.01	412	N	VAL	272	23.311	31.871	87.376	1.00
	ATOM 8.53	414	CA	VAL	272	22.501	31.778	88.577	1.00
55	ATOM 10.04	415	CB	VAL	272	22.991	30.643	89.516	1.00
	ATOM 8.99	416	CG1	VAL	272	22.089	30.562	90.776	1.00

	ATOM 9.42	417	CG2	VAL	272	22.962	29.341	88.754	1.00
	ATOM 8.99	418	C	VAL	272	22.551	33.066	89.373	1.00
5	ATOM 9.70	419	O	VAL	272	23.604	33.496	89.799	1.00
	ATOM 10.49	420	N	LYS	273	21.397	33.713	89.473	1.00
10	ATOM 12.00	422	CA	LYS	273	21.250	34.941	90.240	1.00
	ATOM 14.81	423	CB	LYS	273	20.196	35.824	89.540	1.00
	ATOM 20.98	424	CG	LYS	273	20.151	37.282	90.025	1.00
15	ATOM 21.51	425	CD	LYS	273	19.145	38.096	89.197	1.00
	ATOM 25.70	426	CE	LYS	273	19.180	39.574	89.551	1.00
20	ATOM 26.23	427	NZ	LYS	273	18.104	40.361	88.885	1.00
	ATOM 12.95	431	C	LYS	273	20.778	34.571	91.660	1.00
	ATOM 10.71	432	O	LYS	273	19.717	33.951	91.823	1.00
25	ATOM 11.60	433	N	SER	274	21.572	34.907	92.662	1.00
	ATOM 14.29	435	CA	SER	274	21.239	34.619	94.053	1.00
30	ATOM 15.73	436	CB	SER	274	22.491	34.100	94.762	1.00
	ATOM 18.57	437	OG	SER	274	23.481	35.139	94.783	1.00
	ATOM 16.33	439	C	SER	274	20.792	35.880	94.777	1.00
35	ATOM 16.75	440	O	SER	274	21.347	36.931	94.557	1.00
	ATOM 17.75	441	N	LEU	275	19.812	35.772	95.658	1.00
40	ATOM 19.66	443	CA	LEU	275	19.364	36.926	96.416	1.00
	ATOM 17.82	444	CB	LEU	275	17.874	36.790	96.750	1.00
	ATOM 18.34	445	CG	LEU	275	17.242	37.763	97.782	1.00
45	ATOM 16.13	446	CD1	LEU	275	17.364	39.217	97.340	1.00
	ATOM 19.31	447	CD2	LEU	275	15.773	37.399	97.936	1.00
50	ATOM 20.05	448	C	LEU	275	20.136	37.100	97.708	1.00
	ATOM 21.68	449	O	LEU	275	20.235	36.168	98.520	1.00
	ATOM 21.85	450	N	LYS	276	20.678	38.291	97.915	1.00
55	ATOM 22.31	452	CA	LYS	276	21.344	38.566	99.161	1.00
	ATOM 22.82	453	CB	LYS	276	22.108	39.880	99.083	1.00

5	ATOM 23.68	454	CG	LYS	276	22.633	40.254	100.446	1.00
	ATOM 23.56	455	CD	LYS	276	23.468	41.476	100.398	1.00
	ATOM 26.66	456	CE	LYS	276	24.054	41.658	101.760	1.00
	ATOM 28.24	457	NZ	LYS	276	25.196	42.568	101.684	1.00
10	ATOM 23.91	461	C	LYS	276	20.266	38.685	100.241	1.00
	ATOM 22.65	462	O	LYS	276	19.513	39.656	100.269	1.00
	ATOM 25.44	463	N	ALA	277	20.162	37.673	101.091	1.00
15	ATOM 28.36	465	CA	ALA	277	19.147	37.644	102.135	1.00
	ATOM 27.71	466	CB	ALA	277	19.387	36.469	103.085	1.00
	ATOM 28.32	467	C	ALA	277	19.046	38.925	102.913	1.00
20	ATOM 31.33	468	O	ALA	277	20.033	39.430	103.427	1.00
	ATOM 29.93	469	N	GLY	278	17.857	39.515	102.899	1.00
	ATOM 29.72	471	CA	GLY	278	17.618	40.743	103.638	1.00
25	ATOM 30.31	472	C	GLY	278	17.743	42.014	102.841	1.00
	ATOM 31.97	473	O	GLY	278	17.208	43.047	103.231	1.00
	ATOM 29.29	474	N	SER	279	18.424	41.945	101.705	1.00
30	ATOM 27.22	476	CA	SER	279	18.618	43.119	100.863	1.00
	ATOM 27.32	477	CB	SER	279	19.657	42.833	99.784	1.00
	ATOM 27.64	478	OG	SER	279	19.144	41.896	98.846	1.00
35	ATOM 26.04	480	C	SER	279	17.359	43.602	100.183	1.00
	ATOM 26.50	481	O	SER	279	17.230	44.747	99.832	1.00
	ATOM 24.08	482	N	MET	280	16.492	42.668	99.844	1.00
40	ATOM 20.84	484	CA	MET	280	15.241	43.003	99.200	1.00
	ATOM 22.08	485	CB	MET	280	15.440	43.303	97.712	1.00
	ATOM 18.69	486	CG	MET	280	15.974	42.167	96.890	1.00
45	ATOM 22.52	487	SD	MET	280	15.987	42.519	95.137	1.00
	ATOM 10.03	488	CE	MET	280	14.275	42.290	94.709	1.00
	ATOM 19.05	489	C	MET	280	14.289	41.854	99.400	1.00
55	ATOM 18.43	490	O	MET	280	14.700	40.750	99.704	1.00

	ATOM 15.80	491	N	SER	281	13.009	42.108	99.301	1.00
	ATOM 15.96	493	CA	SER	281	12.032	41.073	99.498	1.00
5	ATOM 17.20	494	CB	SER	281	10.645	41.676	99.366	1.00
	ATOM 16.98	495	OG	SER	281	9.725	40.685	98.991	1.00
10	ATOM 14.42	497	C	SER	281	12.156	39.928	98.493	1.00
	ATOM 15.13	498	O	SER	281	12.369	40.178	97.303	1.00
	ATOM 11.99	499	N	PRO	282	12.017	38.677	98.944	0.51
15	ATOM 12.01	500	CD	PRO	282	12.119	38.272	100.351	0.51
	ATOM 9.71	501	CA	PRO	282	12.092	37.516	98.056	0.51
20	ATOM 9.45	502	CB	PRO	282	11.942	36.318	99.009	0.51
	ATOM 11.53	503	CG	PRO	282	11.505	36.907	100.327	0.51
	ATOM 8.44	504	C	PRO	282	10.971	37.570	97.000	0.51
25	ATOM 3.52	505	O	PRO	282	11.137	37.132	95.864	0.51
	ATOM 9.84	506	N	ASP	283	9.801	38.069	97.408	1.00
30	ATOM 10.75	508	CA	ASP	283	8.689	38.252	96.484	1.00
	ATOM 15.31	509	CB	ASP	283	7.478	38.857	97.209	1.00
	ATOM 18.52	510	CG	ASP	283	6.276	39.016	96.301	1.00
35	ATOM 18.82	511	OD1	ASP	283	5.791	37.972	95.818	1.00
	ATOM 19.91	512	OD2	ASP	283	5.809	40.169	96.061	1.00
40	ATOM 10.82	513	C	ASP	283	9.100	39.211	95.391	1.00
	ATOM 10.24	514	O	ASP	283	8.812	38.997	94.250	1.00
	ATOM 9.15	515	N	ALA	284	9.787	40.295	95.769	1.00
45	ATOM 12.47	517	CA	ALA	284	10.252	41.282	94.770	1.00
	ATOM 11.84	518	CB	ALA	284	10.921	42.462	95.466	1.00
50	ATOM 12.12	519	C	ALA	284	11.250	40.642	93.803	1.00
	ATOM 12.27	520	O	ALA	284	11.134	40.745	92.569	1.00
	ATOM 13.53	521	N	PHE	285	12.176	39.881	94.384	1.00
55	ATOM 12.88	523	CA	PHE	285	13.198	39.163	93.620	1.00
	ATOM 10.02	524	CB	PHE	285	14.092	38.404	94.615	1.00

	ATOM 9.97	525	CG	PHE	285	15.241	37.657	93.979	1.00
	ATOM 11.33	526	CD1	PHE	285	16.388	38.312	93.585	1.00
5	ATOM 10.09	527	CD2	PHE	285	15.171	36.266	93.824	1.00
	ATOM 12.01	528	CE1	PHE	285	17.468	37.590	93.037	1.00
10	ATOM 8.91	529	CE2	PHE	285	16.222	35.561	93.297	1.00
	ATOM 9.02	530	CZ	PHE	285	17.366	36.215	92.905	1.00
	ATOM 13.34	531	C	PHE	285	12.551	38.230	92.597	1.00
15	ATOM 14.06	532	O	PHE	285	12.767	38.355	91.376	1.00
	ATOM 13.73	533	N	LEU	286	11.645	37.378	93.082	1.00
20	ATOM 13.26	535	CA	LEU	286	10.950	36.406	92.251	1.00
	ATOM 13.89	536	CB	LEU	286	10.195	35.405	93.118	1.00
	ATOM 14.02	537	CG	LEU	286	11.161	34.471	93.851	1.00
25	ATOM 15.09	538	CD1	LEU	286	10.336	33.449	94.581	1.00
	ATOM 14.06	539	CD2	LEU	286	12.141	33.772	92.882	1.00
30	ATOM 14.59	540	C	LEU	286	10.013	36.957	91.164	1.00
	ATOM 12.36	541	O	LEU	286	9.770	36.292	90.126	1.00
	ATOM 12.82	542	N	ALA	287	9.545	38.181	91.372	1.00
35	ATOM 14.03	544	CA	ALA	287	8.674	38.823	90.398	1.00
	ATOM 12.35	545	CB	ALA	287	8.299	40.253	90.886	1.00
40	ATOM 12.11	546	C	ALA	287	9.309	38.885	89.011	1.00
	ATOM 14.16	547	O	ALA	287	8.624	38.732	88.000	1.00
	ATOM 13.07	548	N	GLU	288	10.616	39.149	88.967	1.00
45	ATOM 13.61	550	CA	GLU	288	11.337	39.210	87.702	1.00
	ATOM 17.54	551	CB	GLU	288	12.823	39.550	87.924	1.00
50	ATOM 20.67	552	CG	GLU	288	13.514	40.087	86.624	1.00
	ATOM 22.80	553	CD	GLU	288	15.010	39.853	86.585	1.00
	ATOM 26.25	554	OE1	GLU	288	15.609	39.713	87.685	1.00
55	ATOM 23.11	555	OE2	GLU	288	15.592	39.825	85.452	1.00
	ATOM 14.04	556	C	GLU	288	11.243	37.890	86.941	1.00



	ATOM 11.37	557	O	GLU	288	11.074	37.858	85.713	1.00
	ATOM 13.32	558	N	ALA	289	11.356	36.776	87.677	1.00
5	ATOM 12.33	560	CA	ALA	289	11.255	35.459	87.014	1.00
	ATOM 9.97	561	CB	ALA	289	11.609	34.340	87.987	1.00
10	ATOM 11.60	562	C	ALA	289	9.850	35.258	86.462	1.00
	ATOM 11.52	563	O	ALA	289	9.653	34.800	85.348	1.00
	ATOM 13.27	564	N	ASN	290	8.839	35.611	87.257	1.00
15	ATOM 12.41	566	CA	ASN	290	7.457	35.477	86.807	1.00
	ATOM 14.49	567	CB	ASN	290	6.502	35.901	87.931	1.00
20	ATOM 20.55	568	CG	ASN	290	6.524	34.917	89.099	1.00
	ATOM 22.92	569	OD1	ASN	290	6.929	33.755	88.937	1.00
	ATOM 22.93	570	ND2	ASN	290	6.105	35.377	90.279	1.00
25	ATOM 12.76	573	C	ASN	290	7.213	36.292	85.530	1.00
	ATOM 11.17	574	O	ASN	290	6.540	35.854	84.595	1.00
30	ATOM 11.61	575	N	LEU	291	7.795	37.485	85.456	1.00
	ATOM 11.64	577	CA	LEU	291	7.626	38.259	84.224	1.00
	ATOM 9.96	578	CB	LEU	291	8.169	39.673	84.422	1.00
35	ATOM 11.85	579	CG	LEU	291	8.160	40.645	83.255	1.00
	ATOM 13.57	580	CD1	LEU	291	7.872	42.090	83.793	1.00
40	ATOM 14.59	581	CD2	LEU	291	9.451	40.583	82.529	1.00
	ATOM 11.11	582	C	LEU	291	8.346	37.596	83.032	1.00
	ATOM 8.95	583	O	LEU	291	7.835	37.568	81.936	1.00
45	ATOM 10.78	584	N	MET	292	9.556	37.084	83.258	1.00
	ATOM 11.56	586	CA	MET	292	10.318	36.453	82.163	1.00
50	ATOM 10.22	587	CB	MET	292	11.703	36.016	82.636	1.00
	ATOM 10.81	588	CG	MET	292	12.600	37.176	83.098	1.00
	ATOM 12.07	589	SD	MET	292	14.110	36.571	83.937	1.00
55	ATOM 9.73	590	CE	MET	292	15.113	36.169	82.522	1.00
	ATOM 13.99	591	C	MET	292	9.576	35.269	81.533	1.00

	ATOM 13.51	592	O	MET	292	9.781	34.955	80.375	1.00
	ATOM 14.27	593	N	LYS	293	8.747	34.600	82.326	1.00
5	ATOM 18.20	595	CA	LYS	293	7.927	33.505	81.810	1.00
	ATOM 17.91	596	CB	LYS	293	7.059	32.889	82.918	1.00
10	ATOM 19.57	597	CG	LYS	293	7.788	32.069	83.956	1.00
	ATOM 22.28	598	CD	LYS	293	6.832	31.655	85.125	1.00
	ATOM 24.15	599	CE	LYS	293	7.630	31.258	86.369	1.00
15	ATOM 26.53	600	NZ	LYS	293	6.765	30.817	87.547	1.00
	ATOM 17.56	604	C	LYS	293	7.027	33.985	80.642	1.00
20	ATOM 19.70	605	O	LYS	293	6.825	33.260	79.667	1.00
	ATOM 18.40	606	N	GLN	294	6.569	35.232	80.725	1.00
	ATOM 18.61	608	CA	GLN	294	5.715	35.871	79.692	1.00
25	ATOM 18.33	609	CB	GLN	294	4.932	37.056	80.299	1.00
	ATOM 18.95	610	CG	GLN	294	4.157	36.753	81.587	1.00
30	ATOM 21.42	611	CD	GLN	294	3.299	35.548	81.445	1.00
	ATOM 25.23	612	OE1	GLN	294	2.661	35.330	80.392	1.00
	ATOM 23.40	613	NE2	GLN	294	3.288	34.712	82.470	1.00
35	ATOM 18.97	616	C	GLN	294	6.479	36.459	78.519	1.00
	ATOM 20.23	617	O	GLN	294	5.883	37.021	77.573	1.00
40	ATOM 17.18	618	N	LEU	295	7.799	36.476	78.608	1.00
	ATOM 15.88	620	CA	LEU	295	8.571	37.061	77.539	1.00
	ATOM 16.19	621	CB	LEU	295	9.206	38.391	77.978	1.00
45	ATOM 14.51	622	CG	LEU	295	8.265	39.561	78.250	1.00
	ATOM 14.42	623	CD1	LEU	295	9.034	40.678	78.953	1.00
50	ATOM 14.80	624	CD2	LEU	295	7.672	40.025	76.914	1.00
	ATOM 15.46	625	C	LEU	295	9.634	36.148	77.051	1.00
	ATOM 16.92	626	O	LEU	295	10.808	36.414	77.229	1.00
55	ATOM 13.87	627	N	GLN	296	9.217	35.076	76.402	1.00
	ATOM 12.14	629	CA	GLN	296	10.166	34.124	75.882	1.00

	ATOM 12.02	630	CB	GLN	296	9.622	32.698	76.060	1.00
	ATOM 13.14	631	CG	GLN	296	9.503	32.296	77.521	1.00
5	ATOM 13.95	632	CD	GLN	296	8.863	30.942	77.698	1.00
	ATOM 14.90	633	OE1	GLN	296	9.306	29.989	77.113	1.00
10	ATOM 11.25	634	NE2	GLN	296	7.815	30.863	78.526	1.00
	ATOM 11.43	637	C	GLN	296	10.377	34.436	74.422	1.00
	ATOM 10.56	638	O	GLN	296	9.420	34.517	73.667	1.00
15	ATOM 8.16	639	N	HIS	297	11.615	34.700	74.047	1.00
	ATOM 7.06	641	CA	HIS	297	11.925	35.031	72.665	1.00
20	ATOM 8.21	642	CB	HIS	297	11.524	36.520	72.425	1.00
	ATOM 7.91	643	CG	HIS	297	11.682	36.972	71.002	1.00
	ATOM 9.84	644	CD2	HIS	297	10.810	37.047	69.993	1.00
25	ATOM 7.23	645	ND1	HIS	297	12.919	37.329	70.475	1.00
	ATOM 7.62	647	CE1	HIS	297	12.776	37.594	69.201	1.00
30	ATOM 8.05	648	NE2	HIS	297	11.501	37.428	68.858	1.00
	ATOM 5.69	650	C	HIS	297	13.408	34.835	72.494	1.00
	ATOM 6.84	651	O	HIS	297	14.156	35.019	73.484	1.00
35	ATOM 5.85	652	N	GLN	298	13.888	34.501	71.297	1.00
	ATOM 5.85	654	CA	GLN	298	15.348	34.304	71.124	1.00
40	ATOM 7.17	655	CB	GLN	298	15.751	33.937	69.688	1.00
	ATOM 7.62	656	CG	GLN	298	15.283	32.622	69.181	1.00
	ATOM 5.57	657	CD	GLN	298	15.876	31.431	69.900	1.00
45	ATOM 6.33	658	OE1	GLN	298	15.131	30.570	70.307	1.00
	ATOM 3.89	659	NE2	GLN	298	17.232	31.341	69.984	1.00
50	ATOM 6.17	662	C	GLN	298	16.203	35.502	71.486	1.00
	ATOM 4.21	663	O	GLN	298	17.357	35.340	71.902	1.00
	ATOM 5.30	664	N	ARG	299	15.660	36.706	71.294	1.00
55	ATOM 5.58	666	CA	ARG	299	16.427	37.934	71.588	1.00
	ATOM 5.47	667	CB	ARG	299	16.016	39.064	70.642	1.00

	ATOM 5.45	668	CG	ARG	299	16.154	38.726	69.148	1.00
	ATOM 6.21	669	CD	ARG	299	17.567	39.101	68.588	1.00
5	ATOM 4.29	670	NE	ARG	299	18.692	38.485	69.320	1.00
	ATOM 6.38	672	CZ	ARG	299	19.049	37.196	69.256	1.00
10	ATOM 2.92	673	NH1	ARG	299	18.364	36.337	68.501	1.00
	ATOM 2.41	676	NH2	ARG	299	20.162	36.791	69.863	1.00
	ATOM 4.17	679	C	ARG	299	16.369	38.420	73.047	1.00
15	ATOM 2.82	680	O	ARG	299	16.849	39.506	73.342	1.00
	ATOM 2.95	681	N	LEU	300	15.673	37.680	73.918	1.00
20	ATOM 5.10	683	CA	LEU	300	15.595	37.956	75.366	1.00
	ATOM 6.30	684	CB	LEU	300	14.140	38.104	75.859	1.00
	ATOM 6.48	685	CG	LEU	300	13.449	39.474	75.631	1.00
25	ATOM 5.11	686	CD1	LEU	300	13.525	39.871	74.166	1.00
	ATOM 5.95	687	CD2	LEU	300	11.972	39.426	76.097	1.00
30	ATOM 5.43	688	C	LEU	300	16.261	36.823	76.189	1.00
	ATOM 8.06	689	O	LEU	300	16.035	35.652	75.890	1.00
	ATOM 3.26	690	N	VAL	301	17.114	37.172	77.153	1.00
35	ATOM 4.14	692	CA	VAL	301	17.729	36.170	78.009	1.00
	ATOM 5.85	693	CB	VAL	301	18.612	36.847	79.115	1.00
40	ATOM 6.95	694	CG1	VAL	301	18.976	35.830	80.239	1.00
	ATOM 4.28	695	CG2	VAL	301	19.908	37.376	78.452	1.00
	ATOM 4.74	696	C	VAL	301	16.589	35.341	78.595	1.00
45	ATOM 3.76	697	O	VAL	301	15.607	35.898	79.118	1.00
	ATOM 5.01	698	N	ARG	302	16.655	34.034	78.353	1.00
50	ATOM 6.78	700	CA	ARG	302	15.582	33.093	78.747	1.00
	ATOM 4.29	701	CB	ARG	302	15.586	31.885	77.760	1.00
	ATOM 5.87	702	CG	ARG	302	14.425	30.854	77.977	1.00
55	ATOM 10.00	703	CD	ARG	302	14.589	29.621	77.023	1.00
	ATOM 10.74	704	NE	ARG	302	13.653	28.529	77.330	1.00

	ATOM 13.16	706	CZ	ARG	302	13.839	27.642	78.306	1.00
	ATOM 10.13	707	NH1	ARG	302	14.931	27.696	79.064	1.00
5	ATOM 14.10	710	NH2	ARG	302	12.917	26.721	78.546	1.00
	ATOM 4.90	713	C	ARG	302	15.638	32.574	80.157	1.00
10	ATOM 4.69	714	O	ARG	302	16.711	32.175	80.623	1.00
	ATOM 3.59	715	N	LEU	303	14.497	32.607	80.849	1.00
	ATOM 5.79	717	CA	LEU	303	14.419	32.026	82.175	1.00
15	ATOM 4.46	718	CB	LEU	303	13.045	32.312	82.820	1.00
	ATOM 6.09	719	CG	LEU	303	12.798	31.556	84.147	1.00
20	ATOM 5.83	720	CD1	LEU	303	13.683	32.133	85.182	1.00
	ATOM 5.76	721	CD2	LEU	303	11.298	31.702	84.590	1.00
	ATOM 6.12	722	C	LEU	303	14.597	30.495	82.033	1.00
25	ATOM 5.68	723	O	LEU	303	14.016	29.880	81.137	1.00
	ATOM 6.67	724	N	TYR	304	15.467	29.939	82.854	1.00
30	ATOM 10.36	726	CA	TYR	304	15.760	28.519	82.853	1.00
	ATOM 12.58	727	CB	TYR	304	17.291	28.358	83.016	1.00
	ATOM 18.48	728	CG	TYR	304	17.822	26.995	82.695	1.00
35	ATOM 18.80	729	CD1	TYR	304	17.631	25.921	83.579	1.00
	ATOM 20.58	730	CE1	TYR	304	18.052	24.647	83.257	1.00
40	ATOM 19.27	731	CD2	TYR	304	18.451	26.747	81.479	1.00
	ATOM 18.54	732	CE2	TYR	304	18.876	25.452	81.134	1.00
	ATOM 20.02	733	CZ	TYR	304	18.670	24.416	82.021	1.00
45	ATOM 20.08	734	OH	TYR	304	19.095	23.141	81.707	1.00
	ATOM 9.73	736	C	TYR	304	15.001	27.749	83.976	1.00
50	ATOM 10.05	737	O	TYR	304	14.413	26.700	83.742	1.00
	ATOM 7.52	738	N	ALA	305	15.004	28.302	85.185	1.00
	ATOM 9.06	740	CA	ALA	305	14.384	27.634	86.321	1.00
55	ATOM 9.73	741	CB	ALA	305	15.183	26.340	86.675	1.00
	ATOM 7.93	742	C	ALA	305	14.446	28.551	87.520	1.00

	ATOM 5.51	743	O	ALA	305	15.064	29.608	87.437	1.00
	ATOM 5.06	744	N	VAL	306	13.812	28.133	88.606	0.75
5	ATOM 5.16	746	CA	VAL	306	13.843	28.850	89.869	0.75
	ATOM 5.18	747	CB	VAL	306	12.577	29.752	90.092	0.75
10	ATOM 4.67	748	CG1	VAL	306	12.496	30.839	89.018	0.75
	ATOM 8.77	749	CG2	VAL	306	11.296	28.899	90.096	0.75
	ATOM 7.22	750	C	VAL	306	13.890	27.878	91.033	0.75
15	ATOM 5.43	751	O	VAL	306	13.539	26.688	90.902	0.75
	ATOM 10.68	752	N	VAL	307	14.463	28.359	92.125	1.00
20	ATOM 12.59	754	CA	VAL	307	14.508	27.659	93.397	1.00
	ATOM 13.79	755	CB	VAL	307	15.958	27.351	93.812	1.00
	ATOM 13.71	756	CG1	VAL	307	16.007	26.697	95.200	1.00
25	ATOM 14.06	757	CG2	VAL	307	16.608	26.402	92.743	1.00
	ATOM 13.65	758	C	VAL	307	13.868	28.676	94.353	1.00
30	ATOM 13.40	759	O	VAL	307	14.442	29.722	94.622	1.00
	ATOM 14.36	760	N	THR	308	12.636	28.409	94.744	1.00
	ATOM 17.04	762	CA	THR	308	11.868	29.320	95.583	1.00
35	ATOM 17.52	763	CB	THR	308	10.423	29.408	95.087	1.00
	ATOM 17.06	764	OG1	THR	308	9.839	28.089	95.072	1.00
40	ATOM 14.81	766	CG2	THR	308	10.407	29.988	93.650	1.00
	ATOM 20.73	767	C	THR	308	11.915	29.139	97.116	1.00
	ATOM 20.55	768	O	THR	308	11.151	29.785	97.843	1.00
45	ATOM 23.05	769	N	ALA	309	12.808	28.273	97.576	1.00
	ATOM 26.63	771	CA	ALA	309	13.075	28.034	98.990	1.00
50	ATOM 27.10	772	CB	ALA	309	13.186	26.514	99.259	1.00
	ATOM 27.06	773	C	ALA	309	14.400	28.710	99.259	1.00
	ATOM 28.53	774	O	ALA	309	15.294	28.651	98.421	1.00
55	ATOM 29.16	775	N	GLU	310	14.528	29.426	100.372	1.00
	ATOM 29.78	777	CA	GLU	310	15.768	30.145	100.684	1.00

5	ATOM 32.43	778	CB	GLU	310	15.524	31.083	101.885	1.00
	ATOM 37.17	779	CG	GLU	310	14.395	32.120	101.619	1.00
	ATOM 40.15	780	CD	GLU	310	14.264	33.233	102.677	1.00
	ATOM 41.14	781	OE1	GLU	310	15.052	33.274	103.659	1.00
10	ATOM 41.13	782	OE2	GLU	310	13.356	34.084	102.516	1.00
	ATOM 30.28	783	C	GLU	310	16.979	29.220	100.920	1.00
	ATOM 30.28	784	O	GLU	310	16.810	28.135	101.475	1.00
	ATOM 27.46	785	N	PRO	311	18.184	29.589	100.401	1.00
15	ATOM 27.79	786	CD	PRO	311	19.431	28.823	100.539	1.00
	ATOM 26.53	787	CA	PRO	311	18.399	30.791	99.598	1.00
	ATOM 28.19	788	CB	PRO	311	19.921	30.941	99.589	1.00
	ATOM 28.21	789	CG	PRO	311	20.403	29.570	99.615	1.00
20	ATOM 25.22	790	C	PRO	311	17.793	30.569	98.210	1.00
	ATOM 25.62	791	O	PRO	311	17.759	29.443	97.689	1.00
	ATOM 20.59	792	N	ILE	312	17.237	31.642	97.668	1.00
	ATOM 18.53	794	CA	ILE	312	16.521	31.626	96.409	1.00
25	ATOM 20.69	795	CB	ILE	312	15.394	32.689	96.474	1.00
	ATOM 23.02	796	CG2	ILE	312	14.560	32.665	95.198	1.00
	ATOM 23.23	797	CG1	ILE	312	14.486	32.398	97.690	1.00
	ATOM 25.11	798	CD1	ILE	312	13.437	33.459	97.930	1.00
30	ATOM 15.57	799	C	ILE	312	17.387	31.914	95.222	1.00
	ATOM 13.64	800	O	ILE	312	18.319	32.702	95.295	1.00
	ATOM 11.22	801	N	TYR	313	17.039	31.313	94.092	1.00
	ATOM 10.98	803	CA	TYR	313	17.780	31.540	92.849	1.00
35	ATOM 13.10	804	CB	TYR	313	18.696	30.350	92.514	1.00
	ATOM 16.88	805	CG	TYR	313	19.723	29.965	93.549	1.00
	ATOM 18.93	806	CD1	TYR	313	20.558	30.910	94.130	1.00
	ATOM 20.18	807	CE1	TYR	313	21.559	30.535	95.042	1.00
40	ATOM 19.50	808	CD2	TYR	313	19.901	28.643	93.896	1.00

	ATOM	809	CE2	TYR	313	20.874	28.260	94.810	1.00
	23.04								
	ATOM	810	CZ	TYR	313	21.700	29.198	95.382	1.00
	22.50								
5	ATOM	811	OH	TYR	313	22.615	28.780	96.334	1.00
	23.90								
	ATOM	813	C	TYR	313	16.847	31.681	91.660	1.00
	7.53								
10	ATOM	814	O	TYR	313	15.759	31.147	91.663	1.00
	7.59								
	ATOM	815	N	ILE	314	17.274	32.485	90.708	0.82
	5.19								
	ATOM	817	CA	ILE	314	16.629	32.619	89.430	0.82
	4.86								
15	ATOM	818	CB	ILE	314	16.262	34.121	89.045	0.82
	4.18								
	ATOM	819	CG2	ILE	314	15.868	34.202	87.538	0.82
	4.60								
	ATOM	820	CG1	ILE	314	15.121	34.628	89.927	0.82
	4.86								
20	ATOM	821	CD1	ILE	314	14.733	36.090	89.720	0.82
	5.03								
	ATOM	822	C	ILE	314	17.709	32.110	88.468	0.82
	3.70								
25	ATOM	823	O	ILE	314	18.834	32.649	88.420	0.82
	4.66								
	ATOM	824	N	ILE	315	17.421	31.047	87.742	1.00
	3.50								
	ATOM	826	CA	ILE	315	18.429	30.500	86.833	1.00
	4.82								
30	ATOM	827	CB	ILE	315	18.532	28.945	86.945	1.00
	6.00								
	ATOM	828	CG2	ILE	315	19.664	28.420	86.046	1.00
	2.00								
35	ATOM	829	CG1	ILE	315	18.799	28.533	88.401	1.00
	7.08								
	ATOM	830	CD1	ILE	315	17.513	28.158	89.123	1.00
	9.51								
	ATOM	831	C	ILE	315	18.094	30.888	85.408	1.00
	4.20								
40	ATOM	832	O	ILE	315	16.958	30.735	84.988	1.00
	3.76								
	ATOM	833	N	THR	316	19.069	31.406	84.672	1.00
	3.78								
45	ATOM	835	CA	THR	316	18.801	31.849	83.327	1.00
	6.81								
	ATOM	836	CB	THR	316	18.795	33.443	83.208	1.00
	10.74								
	ATOM	837	OG1	THR	316	20.135	33.944	83.317	1.00
	8.08								
50	ATOM	839	CG2	THR	316	17.941	34.094	84.309	1.00
	7.54								
	ATOM	840	C	THR	316	19.836	31.360	82.341	1.00
	8.02								
55	ATOM	841	O	THR	316	20.829	30.707	82.705	1.00
	7.95								
	ATOM	842	N	GLU	317	19.546	31.668	81.073	1.00
	8.12								



	ATOM 6.24	844	CA	GLU	317	20.406	31.390	79.925	1.00
	ATOM 6.14	845	CB	GLU	317	19.697	32.000	78.689	1.00
5	ATOM 5.27	846	CG	GLU	317	20.403	31.836	77.334	1.00
	ATOM 6.54	847	CD	GLU	317	19.526	32.312	76.153	1.00
10	ATOM 8.58	848	OE1	GLU	317	18.590	33.110	76.366	1.00
	ATOM 6.88	849	OE2	GLU	317	19.786	31.895	74.992	1.00
	ATOM 6.62	850	C	GLU	317	21.746	32.105	80.164	1.00
15	ATOM 5.80	851	O	GLU	317	21.770	33.266	80.625	1.00
	ATOM 4.84	852	N	TYR	318	22.845	31.425	79.833	1.00
20	ATOM 20.00	853	H	TYR	318	22.781	30.554	79.430	1.00
	ATOM 7.09	854	CA	TYR	318	24.194	31.946	79.996	1.00
	ATOM 6.94	855	CB	TYR	318	25.127	30.784	80.307	1.00
25	ATOM 8.70	856	CG	TYR	318	26.586	31.175	80.412	1.00
	ATOM 8.78	857	CD1	TYR	318	27.507	30.641	79.536	1.00
30	ATOM 12.40	858	CE1	TYR	318	28.838	30.963	79.622	1.00
	ATOM 9.60	859	CD2	TYR	318	27.032	32.056	81.395	1.00
	ATOM 11.60	860	CE2	TYR	318	28.398	32.393	81.499	1.00
35	ATOM 12.34	861	CZ	TYR	318	29.282	31.831	80.592	1.00
	ATOM 13.65	862	OH	TYR	318	30.605	32.172	80.614	1.00
40	ATOM 7.87	864	C	TYR	318	24.679	32.630	78.718	1.00
	ATOM 7.67	865	O	TYR	318	24.588	32.055	77.646	1.00
	ATOM 7.03	866	N	MET	319	25.230	33.826	78.851	1.00
45	ATOM 7.90	868	CA	MET	319	25.733	34.612	77.702	1.00
	ATOM 7.45	869	CB	MET	319	24.936	35.929	77.662	1.00
50	ATOM 8.56	870	CG	MET	319	23.415	35.686	77.475	1.00
	ATOM 11.41	871	SD	MET	319	23.081	34.959	75.864	1.00
	ATOM 5.20	872	CE	MET	319	23.496	36.172	74.813	1.00
55	ATOM 8.08	873	C	MET	319	27.225	34.826	77.917	1.00
	ATOM 6.69	874	O	MET	319	27.678	35.630	78.741	1.00

5	ATOM 7.13	875	N	GLU	320	27.998	34.004	77.225	1.00
	ATOM 10.02	877	CA	GLU	320	29.433	33.933	77.394	1.00
	ATOM 15.75	878	CB	GLU	320	29.989	32.986	76.317	1.00
	ATOM 23.94	879	CG	GLU	320	31.462	32.922	76.271	1.00
10	ATOM 29.33	880	CD	GLU	320	31.934	31.545	76.529	1.00
	ATOM 33.76	881	OE1	GLU	320	32.143	31.198	77.738	1.00
	ATOM 27.05	882	OE2	GLU	320	31.959	30.741	75.562	1.00
15	ATOM 10.37	883	C	GLU	320	30.271	35.225	77.440	1.00
	ATOM 8.73	884	O	GLU	320	31.225	35.342	78.238	1.00
20	ATOM 6.58	885	N	ASN	321	29.928	36.181	76.579	1.00
	ATOM 6.63	887	CA	ASN	321	30.664	37.418	76.483	1.00
	ATOM 3.44	888	CB	ASN	321	30.812	37.808	74.991	1.00
25	ATOM 7.15	889	CG	ASN	321	31.833	36.914	74.270	1.00
	ATOM 4.07	890	OD1	ASN	321	32.960	36.707	74.772	1.00
30	ATOM 6.04	891	ND2	ASN	321	31.452	36.346	73.151	1.00
	ATOM 6.86	894	C	ASN	321	30.173	38.555	77.364	1.00
	ATOM 7.33	895	O	ASN	321	30.599	39.689	77.211	1.00
35	ATOM 5.72	896	N	GLY	322	29.238	38.237	78.269	1.00
	ATOM 5.81	898	CA	GLY	322	28.783	39.238	79.235	1.00
40	ATOM 4.76	899	C	GLY	322	28.136	40.486	78.701	1.00
	ATOM 4.07	900	O	GLY	322	27.537	40.429	77.649	1.00
	ATOM 4.07	901	N	SER	323	28.234	41.597	79.422	1.00
45	ATOM 4.52	903	CA	SER	323	27.601	42.830	78.975	1.00
	ATOM 5.64	904	CB	SER	323	27.551	43.892	80.118	1.00
50	ATOM 10.41	905	OG	SER	323	26.697	43.489	81.181	1.00
	ATOM 4.42	907	C	SER	323	28.238	43.441	77.759	1.00
	ATOM 6.97	908	O	SER	323	29.475	43.522	77.636	1.00
55	ATOM 2.28	909	N	LEU	324	27.387	43.900	76.853	1.00
	ATOM 5.27	911	CA	LEU	324	27.840	44.535	75.644	1.00

	ATOM 3.48	912	CB	LEU	324	26.642	45.033	74.833	1.00
	ATOM 5.04	913	CG	LEU	324	26.955	45.780	73.529	1.00
5	ATOM 6.71	914	CD1	LEU	324	27.664	44.823	72.523	1.00
	ATOM 8.47	915	CD2	LEU	324	25.617	46.220	72.922	1.00
10	ATOM 5.66	916	C	LEU	324	28.749	45.740	75.945	1.00
	ATOM 6.05	917	O	LEU	324	29.777	45.913	75.288	1.00
	ATOM 6.08	918	N	VAL	325	28.395	46.537	76.950	1.00
15	ATOM 6.56	920	CA	VAL	325	29.227	47.692	77.284	1.00
	ATOM 6.30	921	CB	VAL	325	28.601	48.567	78.411	1.00
20	ATOM 6.07	922	CG1	VAL	325	28.897	47.976	79.791	1.00
	ATOM 6.51	923	CG2	VAL	325	29.125	49.976	78.262	1.00
	ATOM 8.74	924	C	VAL	325	30.668	47.301	77.634	1.00
25	ATOM 8.55	925	O	VAL	325	31.578	48.063	77.344	1.00
	ATOM 8.86	926	N	ASP	326	30.850	46.118	78.250	1.00
30	ATOM 9.40	928	CA	ASP	326	32.183	45.599	78.576	1.00
	ATOM 10.79	929	CB	ASP	326	32.137	44.627	79.786	1.00
	ATOM 15.23	930	CG	ASP	326	31.682	45.309	81.073	1.00
35	ATOM 17.45	931	OD1	ASP	326	31.907	46.527	81.226	1.00
	ATOM 15.65	932	OD2	ASP	326	31.114	44.620	81.945	1.00
40	ATOM 8.47	933	C	ASP	326	32.814	44.878	77.374	1.00
	ATOM 8.70	934	O	ASP	326	34.010	45.097	77.041	1.00
	ATOM 6.30	935	N	PHE	327	32.041	44.008	76.712	1.00
45	ATOM 5.97	937	CA	PHE	327	32.533	43.275	75.550	1.00
	ATOM 6.18	938	CB	PHE	327	31.417	42.452	74.872	1.00
50	ATOM 5.53	939	CG	PHE	327	31.863	41.778	73.574	1.00
	ATOM 5.80	940	CD1	PHE	327	32.755	40.715	73.600	1.00
	ATOM 7.58	941	CD2	PHE	327	31.399	42.238	72.335	1.00
55	ATOM 3.63	942	CE1	PHE	327	33.197	40.104	72.401	1.00
	ATOM 6.07	943	CE2	PHE	327	31.816	41.666	71.151	1.00

	ATOM 6.92	944	CZ	PHE	327	32.733	40.585	71.193	1.00
	ATOM 6.02	945	C	PHE	327	33.179	44.164	74.441	1.00
5	ATOM 4.71	946	O	PHE	327	34.170	43.765	73.827	1.00
	ATOM 2.63	947	N	LEU	328	32.577	45.326	74.176	0.40
10	ATOM 2.00	949	CA	LEU	328	33.076	46.237	73.130	0.40
	ATOM 2.00	950	CB	LEU	328	32.067	47.361	72.882	0.40
	ATOM 2.00	951	CG	LEU	328	30.693	46.917	72.327	0.40
15	ATOM 2.00	952	CD1	LEU	328	29.763	48.096	72.210	0.40
	ATOM 2.00	953	CD2	LEU	328	30.847	46.243	70.979	0.40
20	ATOM 3.02	954	C	LEU	328	34.476	46.819	73.373	0.40
	ATOM 2.00	955	O	LEU	328	35.072	47.402	72.496	0.40
	ATOM 6.19	956	N	LYS	329	34.916	46.745	74.625	1.00
25	ATOM 8.81	958	CA	LYS	329	36.245	47.196	75.057	1.00
	ATOM 9.48	959	CB	LYS	329	36.190	47.773	76.477	1.00
30	ATOM 10.04	960	CG	LYS	329	35.251	48.970	76.589	1.00
	ATOM 9.54	961	CD	LYS	329	35.080	49.401	78.016	1.00
	ATOM 11.11	962	CE	LYS	329	33.808	50.288	78.100	1.00
35	ATOM 13.64	963	NZ	LYS	329	33.664	50.767	79.489	1.00
	ATOM 7.62	967	C	LYS	329	37.304	46.104	75.026	1.00
40	ATOM 6.19	968	O	LYS	329	38.486	46.372	75.245	1.00
	ATOM 7.54	969	N	THR	330	36.882	44.853	74.859	1.00
	ATOM 8.64	971	CA	THR	330	37.876	43.765	74.792	1.00
45	ATOM 6.18	972	CB	THR	330	37.204	42.387	75.026	1.00
	ATOM 8.72	973	OG1	THR	330	36.302	42.117	73.957	1.00
50	ATOM 9.44	975	CG2	THR	330	36.437	42.396	76.362	1.00
	ATOM 8.40	976	C	THR	330	38.543	43.742	73.440	1.00
	ATOM 9.09	977	O	THR	330	38.049	44.349	72.499	1.00
55	ATOM 10.04	978	N	PRO	331	39.628	42.958	73.281	1.00
	ATOM 8.53	979	CD	PRO	331	40.423	42.266	74.324	1.00

	ATOM 10.41	980	CA	PRO	331	40.318	42.890	71.989	1.00
	ATOM 8.90	981	CB	PRO	331	41.418	41.849	72.247	1.00
5	ATOM 10.95	982	CG	PRO	331	41.784	42.165	73.621	1.00
	ATOM 10.90	983	C	PRO	331	39.375	42.460	70.878	1.00
10	ATOM 11.98	984	O	PRO	331	39.397	43.019	69.779	1.00
	ATOM 9.20	985	N	SER	332	38.515	41.491	71.162	1.00
	ATOM 12.25	987	CA	SER	332	37.549	41.082	70.145	1.00
15	ATOM 10.86	988	CB	SER	332	36.719	39.902	70.646	1.00
	ATOM 18.10	989	OG	SER	332	37.530	38.761	70.767	1.00
20	ATOM 11.43	991	C	SER	332	36.570	42.207	69.803	1.00
	ATOM 12.17	992	O	SER	332	36.299	42.481	68.646	1.00
	ATOM 9.65	993	N	GLY	333	36.022	42.826	70.837	1.00
25	ATOM 11.87	995	CA	GLY	333	35.047	43.887	70.619	1.00
	ATOM 10.52	996	C	GLY	333	35.583	45.068	69.838	1.00
30	ATOM 9.33	997	O	GLY	333	34.919	45.600	68.942	1.00
	ATOM 11.53	998	N	ILE	334	36.809	45.476	70.175	1.00
	ATOM 12.33	1000	CA	ILE	334	37.456	46.609	69.508	1.00
35	ATOM 15.13	1001	CB	ILE	334	38.857	46.896	70.146	1.00
	ATOM 16.44	1002	CG2	ILE	334	39.623	47.990	69.348	1.00
40	ATOM 13.62	1003	CG1	ILE	334	38.689	47.316	71.603	1.00
	ATOM 16.24	1004	CD1	ILE	334	40.003	47.491	72.392	1.00
	ATOM 13.92	1005	C	ILE	334	37.581	46.407	68.010	1.00
45	ATOM 17.25	1006	O	ILE	334	37.397	47.319	67.228	1.00
	ATOM 14.22	1007	N	LYS	335	37.860	45.181	67.609	1.00
50	ATOM 15.61	1009	CA	LYS	335	38.026	44.850	66.211	1.00
	ATOM 18.74	1010	CB	LYS	335	38.742	43.501	66.098	1.00
	ATOM 22.01	1011	CG	LYS	335	40.159	43.493	66.675	1.00
55	ATOM 27.64	1012	CD	LYS	335	40.737	42.086	66.747	1.00
	ATOM 29.38	1013	CE	LYS	335	42.031	42.044	67.603	1.00

	ATOM 31.04	1014	NZ	LYS	335	42.383	40.621	68.013	1.00
	ATOM 16.01	1018	C	LYS	335	36.747	44.814	65.372	1.00
5	ATOM 15.29	1019	O	LYS	335	36.824	44.709	64.139	1.00
	ATOM 12.73	1020	N	LEU	336	35.575	44.884	66.004	1.00
10	ATOM 11.81	1022	CA	LEU	336	34.317	44.804	65.218	1.00
	ATOM 12.02	1023	CB	LEU	336	33.094	44.732	66.148	1.00
	ATOM 13.35	1024	CG	LEU	336	33.012	43.570	67.175	1.00
15	ATOM 12.43	1025	CD1	LEU	336	31.657	43.583	67.836	1.00
	ATOM 14.13	1026	CD2	LEU	336	33.251	42.218	66.515	1.00
20	ATOM 10.72	1027	C	LEU	336	34.117	45.968	64.252	1.00
	ATOM 13.53	1028	O	LEU	336	34.325	47.107	64.598	1.00
	ATOM 11.51	1029	N	THR	337	33.666	45.643	63.045	1.00
25	ATOM 12.15	1031	CA	THR	337	33.381	46.634	62.007	1.00
	ATOM 12.79	1032	CB	THR	337	33.218	45.947	60.615	1.00
30	ATOM 12.22	1033	OG1	THR	337	32.154	44.956	60.676	1.00
	ATOM 16.26	1035	CG2	THR	337	34.519	45.285	60.216	1.00
	ATOM 10.27	1036	C	THR	337	32.057	47.342	62.297	1.00
35	ATOM 5.25	1037	O	THR	337	31.229	46.817	63.091	1.00
	ATOM 8.59	1038	N	ILE	338	31.862	48.504	61.690	1.00
40	ATOM 7.74	1040	CA	ILE	338	30.615	49.200	61.846	1.00
	ATOM 10.71	1041	CB	ILE	338	30.579	50.505	61.001	1.00
	ATOM 11.93	1042	CG2	ILE	338	30.765	50.197	59.517	1.00
45	ATOM 8.47	1043	CG1	ILE	338	29.278	51.266	61.284	1.00
	ATOM 12.52	1044	CD1	ILE	338	29.254	51.745	62.769	1.00
50	ATOM 6.40	1045	C	ILE	338	29.467	48.298	61.413	1.00
	ATOM 5.38	1046	O	ILE	338	28.363	48.402	61.924	1.00
	ATOM 7.04	1047	N	ASN	339	29.695	47.468	60.386	1.00
55	ATOM 9.44	1049	CA	ASN	339	28.669	46.535	59.910	1.00
	ATOM 12.90	1050	CB	ASN	339	29.214	45.704	58.744	1.00

5	ATOM 19.02	1051	CG	ASN	339	28.238	44.649	58.244	1.00
	ATOM 21.28	1052	OD1	ASN	339	28.450	43.440	58.443	1.00
	ATOM 19.72	1053	ND2	ASN	339	27.197	45.086	57.522	1.00
	ATOM 6.95	1056	C	ASN	339	28.192	45.606	61.018	1.00
10	ATOM 6.04	1057	O	ASN	339	27.000	45.406	61.199	1.00
	ATOM 6.39	1058	N	LYS	340	29.139	45.038	61.772	1.00
	ATOM 6.76	1060	CA	LYS	340	28.769	44.129	62.873	1.00
	ATOM 7.37	1061	CB	LYS	340	29.985	43.333	63.361	1.00
15	ATOM 7.98	1062	CG	LYS	340	29.723	42.361	64.575	1.00
	ATOM 9.32	1063	CD	LYS	340	28.663	41.312	64.238	1.00
	ATOM 7.68	1064	CE	LYS	340	28.325	40.403	65.435	1.00
	ATOM 11.81	1065	NZ	LYS	340	27.121	39.561	65.006	1.00
20	ATOM 6.46	1069	C	LYS	340	28.090	44.877	64.015	1.00
	ATOM 7.41	1070	O	LYS	340	27.180	44.361	64.669	1.00
	ATOM 4.91	1071	N	LEU	341	28.524	46.122	64.273	1.00
	ATOM 4.71	1073	CA	LEU	341	27.892	46.926	65.316	1.00
25	ATOM 6.87	1074	CB	LEU	341	28.662	48.275	65.487	1.00
	ATOM 5.50	1075	CG	LEU	341	30.145	48.170	65.917	1.00
	ATOM 7.84	1076	CD1	LEU	341	30.792	49.563	66.144	1.00
	ATOM 4.44	1077	CD2	LEU	341	30.228	47.397	67.217	1.00
30	ATOM 6.72	1078	C	LEU	341	26.426	47.218	64.906	1.00
	ATOM 6.30	1079	O	LEU	341	25.554	47.223	65.734	1.00
	ATOM 6.60	1080	N	LEU	342	26.199	47.479	63.610	1.00
	ATOM 8.16	1082	CA	LEU	342	24.852	47.780	63.101	1.00
35	ATOM 8.76	1083	CB	LEU	342	24.924	48.248	61.648	1.00
	ATOM 16.74	1084	CG	LEU	342	24.817	49.735	61.222	1.00
	ATOM 13.92	1085	CD1	LEU	342	24.670	50.708	62.352	1.00
	ATOM 11.93	1086	CD2	LEU	342	25.895	50.108	60.186	1.00
40	ATOM 6.33	1087	C	LEU	342	23.973	46.546	63.229	1.00

	ATOM 4.73	1088	O	LEU	342	22.806	46.636	63.598	1.00
	ATOM 7.09	1089	N	ASP	343	24.571	45.408	62.903	1.00
5	ATOM 7.37	1091	CA	ASP	343	23.914	44.099	63.063	1.00
	ATOM 6.99	1092	CB	ASP	343	24.909	42.987	62.660	1.00
10	ATOM 7.27	1093	CG	ASP	343	24.466	41.581	63.110	1.00
	ATOM 4.56	1094	OD1	ASP	343	23.262	41.350	63.309	1.00
	ATOM 6.70	1095	OD2	ASP	343	25.337	40.719	63.252	1.00
15	ATOM 7.54	1096	C	ASP	343	23.501	43.949	64.529	1.00
	ATOM 7.54	1097	O	ASP	343	22.342	43.697	64.838	1.00
20	ATOM 6.41	1098	N	MET	344	24.436	44.153	65.457	1.00
	ATOM 9.49	1100	CA	MET	344	24.081	44.047	66.885	1.00
	ATOM 8.91	1101	CB	MET	344	25.316	44.208	67.804	1.00
25	ATOM 12.32	1102	CG	MET	344	26.413	43.141	67.567	1.00
	ATOM 16.89	1103	SD	MET	344	27.888	43.520	68.539	1.00
30	ATOM 18.02	1104	CE	MET	344	28.005	42.104	69.644	1.00
	ATOM 7.42	1105	C	MET	344	22.962	45.016	67.328	1.00
	ATOM 7.37	1106	O	MET	344	22.060	44.644	68.090	1.00
35	ATOM 5.31	1107	N	ALA	345	23.005	46.250	66.812	1.00
	ATOM 2.94	1109	CA	ALA	345	21.943	47.219	67.162	1.00
40	ATOM 2.00	1110	CB	ALA	345	22.257	48.613	66.496	1.00
	ATOM 2.66	1111	C	ALA	345	20.581	46.698	66.674	1.00
	ATOM 3.94	1112	O	ALA	345	19.568	46.823	67.371	1.00
45	ATOM 3.10	1113	N	ALA	346	20.563	46.121	65.465	1.00
	ATOM 5.34	1115	CA	ALA	346	19.353	45.540	64.894	1.00
50	ATOM 3.35	1116	CB	ALA	346	19.548	45.098	63.372	1.00
	ATOM 5.71	1117	C	ALA	346	18.825	44.378	65.729	1.00
	ATOM 4.47	1118	O	ALA	346	17.620	44.299	65.955	1.00
55	ATOM 2.71	1119	N	GLN	347	19.720	43.528	66.231	1.00
	ATOM 4.60	1121	CA	GLN	347	19.307	42.428	67.141	1.00



	ATOM 2.74	1122	CB	GLN	347	20.537	41.592	67.562	1.00
	ATOM 5.37	1123	CG	GLN	347	21.216	40.940	66.362	1.00
5	ATOM 7.37	1124	CD	GLN	347	22.320	39.965	66.751	1.00
	ATOM 8.75	1125	OE1	GLN	347	22.353	39.486	67.855	1.00
10	ATOM 5.62	1126	NE2	GLN	347	23.175	39.635	65.804	1.00
	ATOM 4.10	1129	C	GLN	347	18.611	42.971	68.414	1.00
	ATOM 5.67	1130	O	GLN	347	17.575	42.455	68.863	1.00
15	ATOM 2.95	1131	N	ILE	348	19.153	44.050	68.940	1.00
	ATOM 4.54	1133	CA	ILE	348	18.628	44.666	70.150	1.00
20	ATOM 4.65	1134	CB	ILE	348	19.624	45.759	70.691	1.00
	ATOM 3.08	1135	CG2	ILE	348	19.039	46.538	71.882	1.00
	ATOM 3.26	1136	CG1	ILE	348	20.921	45.080	71.163	1.00
25	ATOM 5.43	1137	CD1	ILE	348	22.039	46.103	71.381	1.00
	ATOM 5.36	1138	C	ILE	348	17.268	45.264	69.885	1.00
30	ATOM 4.39	1139	O	ILE	348	16.338	45.032	70.674	1.00
	ATOM 4.26	1140	N	ALA	349	17.137	45.971	68.750	1.00
	ATOM 5.91	1142	CA	ALA	349	15.829	46.544	68.363	1.00
35	ATOM 3.48	1143	CB	ALA	349	15.966	47.377	67.099	1.00
	ATOM 5.32	1144	C	ALA	349	14.794	45.409	68.122	1.00
40	ATOM 4.56	1145	O	ALA	349	13.601	45.564	68.351	1.00
	ATOM 5.83	1146	N	GLU	350	15.282	44.267	67.641	1.00
	ATOM 6.21	1148	CA	GLU	350	14.389	43.127	67.360	1.00
45	ATOM 8.90	1149	CB	GLU	350	15.156	42.033	66.591	1.00
	ATOM 9.23	1150	CG	GLU	350	14.330	40.790	66.305	1.00
50	ATOM 12.88	1151	CD	GLU	350	15.141	39.730	65.550	1.00
	ATOM 12.40	1152	OE1	GLU	350	16.194	40.044	64.946	1.00
	ATOM 13.17	1153	OE2	GLU	350	14.724	38.558	65.564	1.00
55	ATOM 3.70	1154	C	GLU	350	13.807	42.575	68.648	1.00
	ATOM 3.99	1155	O	GLU	350	12.576	42.238	68.754	1.00

	ATOM	1156	N	GLY	351	14.664	42.494	69.666	1.00
	3.72								
	ATOM	1158	CA	GLY	351	14.177	42.064	70.985	1.00
	2.74								
5	ATOM	1159	C	GLY	351	13.231	43.110	71.585	1.00
	3.98								
	ATOM	1160	O	GLY	351	12.206	42.742	72.204	1.00
	2.73								
10	ATOM	1161	N	MET	352	13.563	44.402	71.478	1.00
	3.10								
	ATOM	1163	CA	MET	352	12.672	45.431	72.017	1.00
	3.20								
	ATOM	1164	CB	MET	352	13.346	46.839	71.992	1.00
	4.15								
15	ATOM	1165	CG	MET	352	14.463	46.987	73.003	1.00
	2.46								
	ATOM	1166	SD	MET	352	13.963	46.634	74.672	1.00
	8.88								
20	ATOM	1167	CE	MET	352	12.466	47.792	74.796	1.00
	7.85								
	ATOM	1168	C	MET	352	11.317	45.481	71.244	1.00
	4.14								
	ATOM	1169	O	MET	352	10.298	45.901	71.790	1.00
	4.32								
25	ATOM	1170	N	ALA	353	11.345	45.131	69.947	1.00
	4.31								
	ATOM	1172	CA	ALA	353	10.114	45.102	69.161	1.00
	4.60								
30	ATOM	1173	CB	ALA	353	10.433	44.852	67.643	1.00
	4.58								
	ATOM	1174	C	ALA	353	9.184	44.019	69.694	1.00
	5.84								
	ATOM	1175	O	ALA	353	7.950	44.175	69.740	1.00
	4.41								
35	ATOM	1176	N	PHE	354	9.773	42.911	70.170	1.00
	6.70								
	ATOM	1178	CA	PHE	354	8.962	41.835	70.790	1.00
	6.33								
40	ATOM	1179	CB	PHE	354	9.811	40.577	71.057	1.00
	6.88								
	ATOM	1180	CG	PHE	354	9.080	39.481	71.829	1.00
	9.26								
	ATOM	1181	CD1	PHE	354	8.023	38.781	71.242	1.00
	9.54								
45	ATOM	1182	CD2	PHE	354	9.429	39.186	73.138	1.00
	8.40								
	ATOM	1183	CE1	PHE	354	7.346	37.781	71.957	1.00
	11.15								
50	ATOM	1184	CE2	PHE	354	8.752	38.184	73.867	1.00
	11.06								
	ATOM	1185	CZ	PHE	354	7.698	37.492	73.270	1.00
	8.67								
	ATOM	1186	C	PHE	354	8.360	42.313	72.089	1.00
	5.01								
55	ATOM	1187	O	PHE	354	7.162	42.111	72.360	1.00
	5.21								
	ATOM	1188	N	ILE	355	9.186	42.981	72.909	1.00
	4.92								

	ATOM	1190	CA	ILE	355	8.725	43.546	74.191	1.00
	3.39								
	ATOM	1191	CB	ILE	355	9.910	44.209	74.960	1.00
	4.12								
5	ATOM	1192	CG2	ILE	355	9.446	45.113	76.167	1.00
	3.25								
	ATOM	1193	CG1	ILE	355	10.833	43.105	75.480	1.00
	3.89								
10	ATOM	1194	CD1	ILE	355	12.153	43.638	76.042	1.00
	6.62								
	ATOM	1195	C	ILE	355	7.597	44.548	73.950	1.00
	4.30								
	ATOM	1196	O	ILE	355	6.566	44.533	74.627	1.00
	2.05								
15	ATOM	1197	N	GLU	356	7.783	45.361	72.917	1.00
	5.49								
	ATOM	1199	CA	GLU	356	6.808	46.345	72.527	1.00
	7.59								
20	ATOM	1200	CB	GLU	356	7.382	47.158	71.359	1.00
	8.33								
	ATOM	1201	CG	GLU	356	6.463	48.069	70.575	1.00
	11.40								
	ATOM	1202	CD	GLU	356	7.238	48.763	69.411	1.00
	13.48								
25	ATOM	1203	OE1	GLU	356	7.350	48.218	68.250	1.00
	15.78								
	ATOM	1204	OE2	GLU	356	7.756	49.864	69.664	1.00
	14.27								
30	ATOM	1205	C	GLU	356	5.475	45.692	72.132	1.00
	8.84								
	ATOM	1206	O	GLU	356	4.424	46.054	72.629	1.00
	7.97								
	ATOM	1207	N	GLU	357	5.517	44.734	71.225	1.00
	10.18								
35	ATOM	1209	CA	GLU	357	4.263	44.097	70.820	1.00
	11.61								
	ATOM	1210	CB	GLU	357	4.408	43.355	69.495	1.00
	16.07								
40	ATOM	1211	CG	GLU	357	4.880	41.974	69.512	1.00
	24.33								
	ATOM	1212	CD	GLU	357	3.799	40.973	69.812	1.00
	28.19								
	ATOM	1213	OE1	GLU	357	4.125	40.049	70.565	1.00
	31.78								
45	ATOM	1214	OE2	GLU	357	2.649	41.078	69.322	1.00
	30.15								
	ATOM	1215	C	GLU	357	3.501	43.309	71.911	1.00
	10.18								
50	ATOM	1216	O	GLU	357	2.289	43.180	71.842	1.00
	9.51								
	ATOM	1217	N	ARG	358	4.205	42.869	72.956	1.00
	6.49								
	ATOM	1219	CA	ARG	358	3.574	42.182	74.061	1.00
	7.45								
55	ATOM	1220	CB	ARG	358	4.592	41.215	74.730	1.00
	8.83								
	ATOM	1221	CG	ARG	358	5.135	40.069	73.849	1.00
	7.95								

	ATOM 12.64	1222	CD	ARG	358	3.999	39.232	73.218	1.00
	ATOM 16.71	1223	NE	ARG	358	2.929	38.875	74.159	1.00
5	ATOM 17.48	1225	CZ	ARG	358	1.665	38.636	73.797	1.00
	ATOM 16.26	1226	NH1	ARG	358	1.296	38.710	72.515	1.00
10	ATOM 18.05	1229	NH2	ARG	358	0.740	38.415	74.720	1.00
	ATOM 7.52	1232	C	ARG	358	3.040	43.157	75.124	1.00
	ATOM 7.17	1233	O	ARG	358	2.591	42.738	76.211	1.00
15	ATOM 6.81	1234	N	ASN	359	3.161	44.465	74.860	1.00
	ATOM 8.64	1236	CA	ASN	359	2.694	45.491	75.800	1.00
20	ATOM 9.29	1237	CB	ASN	359	1.188	45.327	76.159	1.00
	ATOM 10.37	1238	CG	ASN	359	0.300	45.844	75.061	1.00
	ATOM 12.00	1239	OD1	ASN	359	0.795	46.342	74.072	1.00
25	ATOM 12.20	1240	ND2	ASN	359	-1.018	45.678	75.204	1.00
	ATOM 8.02	1243	C	ASN	359	3.511	45.652	77.050	1.00
30	ATOM 9.17	1244	O	ASN	359	2.995	46.046	78.108	1.00
	ATOM 5.75	1245	N	TYR	360	4.801	45.314	76.963	1.00
	ATOM 5.81	1247	CA	TYR	360	5.669	45.520	78.112	1.00
35	ATOM 6.39	1248	CB	TYR	360	6.541	44.275	78.342	1.00
	ATOM 7.87	1249	CG	TYR	360	5.816	43.136	79.021	1.00
40	ATOM 9.17	1250	CD1	TYR	360	5.033	42.243	78.288	1.00
	ATOM 11.35	1251	CE1	TYR	360	4.359	41.181	78.927	1.00
	ATOM 9.95	1252	CD2	TYR	360	5.909	42.967	80.389	1.00
45	ATOM 11.89	1253	CE2	TYR	360	5.231	41.931	81.035	1.00
	ATOM 11.40	1254	CZ	TYR	360	4.464	41.063	80.309	1.00
50	ATOM 13.19	1255	OH	TYR	360	3.752	40.116	81.010	1.00
	ATOM 5.77	1257	C	TYR	360	6.621	46.687	77.853	1.00
	ATOM 5.39	1258	O	TYR	360	6.719	47.189	76.730	1.00
55	ATOM 6.08	1259	N	ILE	361	7.307	47.122	78.909	1.00
	ATOM 6.60	1261	CA	ILE	361	8.351	48.130	78.812	1.00

	ATOM 7.46	1262	CB	ILE	361	7.949	49.538	79.349	1.00
	ATOM 7.70	1263	CG2	ILE	361	6.981	50.231	78.354	1.00
5	ATOM 7.66	1264	CG1	ILE	361	7.350	49.430	80.744	1.00
	ATOM 7.95	1265	CD1	ILE	361	7.111	50.762	81.390	1.00
10	ATOM 7.68	1266	C	ILE	361	9.496	47.570	79.658	1.00
	ATOM 6.94	1267	O	ILE	361	9.236	46.794	80.605	1.00
	ATOM 5.85	1268	N	HIS	362	10.722	47.990	79.382	1.00
15	ATOM 6.16	1270	CA	HIS	362	11.865	47.457	80.114	1.00
	ATOM 5.50	1271	CB	HIS	362	12.944	47.124	79.071	1.00
20	ATOM 7.36	1272	CG	HIS	362	14.150	46.453	79.609	1.00
	ATOM 6.35	1273	CD2	HIS	362	14.599	45.170	79.503	1.00
	ATOM 7.52	1274	ND1	HIS	362	15.119	47.120	80.343	1.00
25	ATOM 7.49	1276	CE1	HIS	362	16.091	46.293	80.658	1.00
	ATOM 6.81	1277	NE2	HIS	362	15.807	45.106	80.156	1.00
30	ATOM 4.64	1279	C	HIS	362	12.371	48.418	81.211	1.00
	ATOM 5.59	1280	O	HIS	362	12.588	48.033	82.369	1.00
	ATOM 7.45	1281	N	ARG	363	12.491	49.679	80.831	1.00
35	ATOM 8.43	1283	CA	ARG	363	12.913	50.783	81.704	1.00
	ATOM 7.51	1284	CB	ARG	363	12.035	50.835	82.970	1.00
40	ATOM 10.25	1285	CG	ARG	363	10.576	51.119	82.644	1.00
	ATOM 10.59	1286	CD	ARG	363	9.897	51.683	83.914	1.00
	ATOM 11.72	1287	NE	ARG	363	9.912	50.722	84.981	1.00
45	ATOM 14.15	1289	CZ	ARG	363	9.861	51.032	86.279	1.00
	ATOM 13.54	1290	NH1	ARG	363	9.808	52.301	86.646	1.00
50	ATOM 12.03	1293	NH2	ARG	363	9.797	50.061	87.195	1.00
	ATOM 7.44	1296	C	ARG	363	14.372	50.882	82.117	1.00
	ATOM 7.42	1297	O	ARG	363	14.723	51.804	82.809	1.00
55	ATOM 8.20	1298	N	ASP	364	15.221	50.000	81.634	1.00
	ATOM 7.94	1300	CA	ASP	364	16.643	50.022	82.025	1.00

	ATOM 7.03	1301	CB	ASP	364	16.832	49.052	83.198	1.00
	ATOM 11.50	1302	CG	ASP	364	18.059	49.370	84.068	1.00
5	ATOM 11.51	1303	OD1	ASP	364	18.799	50.329	83.807	1.00
	ATOM 12.82	1304	OD2	ASP	364	18.264	48.627	85.043	1.00
10	ATOM 6.20	1305	C	ASP	364	17.473	49.590	80.842	1.00
	ATOM 5.54	1306	O	ASP	364	18.410	48.799	80.968	1.00
	ATOM 5.04	1307	N	LEU	365	17.034	50.044	79.663	1.00
15	ATOM 4.56	1309	CA	LEU	365	17.656	49.725	78.389	1.00
	ATOM 3.62	1310	CB	LEU	365	16.672	50.008	77.222	1.00
20	ATOM 4.02	1311	CG	LEU	365	17.135	49.719	75.771	1.00
	ATOM 4.75	1312	CD1	LEU	365	17.593	48.293	75.631	1.00
	ATOM 5.53	1313	CD2	LEU	365	16.034	50.008	74.773	1.00
25	ATOM 7.89	1314	C	LEU	365	18.945	50.539	78.213	1.00
	ATOM 8.70	1315	O	LEU	365	18.897	51.775	78.082	1.00
30	ATOM 6.02	1316	N	ARG	366	20.072	49.847	78.307	1.00
	ATOM 7.65	1318	CA	ARG	366	21.398	50.414	78.170	1.00
	ATOM 9.30	1319	CB	ARG	366	21.837	51.023	79.508	1.00
35	ATOM 12.26	1320	CG	ARG	366	21.673	50.061	80.689	1.00
	ATOM 16.24	1321	CD	ARG	366	21.894	50.794	82.011	1.00
40	ATOM 19.64	1322	NE	ARG	366	23.214	51.410	82.088	1.00
	ATOM 23.12	1324	CZ	ARG	366	23.503	52.394	82.930	1.00
	ATOM 24.99	1325	NH1	ARG	366	22.556	52.850	83.748	1.00
45	ATOM 22.43	1328	NH2	ARG	366	24.715	52.926	82.955	1.00
	ATOM 7.09	1331	C	ARG	366	22.324	49.265	77.787	1.00
50	ATOM 6.44	1332	O	ARG	366	21.982	48.103	78.058	1.00
	ATOM 6.74	1333	N	ALA	367	23.516	49.586	77.286	1.00
	ATOM 5.67	1335	CA	ALA	367	24.460	48.562	76.868	1.00
55	ATOM 3.81	1336	CB	ALA	367	25.733	49.199	76.238	1.00
	ATOM 6.22	1337	C	ALA	367	24.852	47.653	78.034	1.00

	ATOM 8.48	1338	O	ALA	367	25.191	46.502	77.806	1.00
	ATOM 4.60	1339	N	ALA	368	24.815	48.157	79.278	1.00
5	ATOM 5.77	1341	CA	ALA	368	25.163	47.268	80.399	1.00
	ATOM 7.66	1342	CB	ALA	368	25.235	48.038	81.749	1.00
10	ATOM 5.40	1343	C	ALA	368	24.161	46.098	80.500	1.00
	ATOM 6.12	1344	O	ALA	368	24.511	44.968	80.918	1.00
	ATOM 5.01	1345	N	ASN	369	22.935	46.343	80.058	1.00
15	ATOM 5.36	1347	CA	ASN	369	21.888	45.330	80.097	1.00
	ATOM 4.47	1348	CB	ASN	369	20.623	45.916	80.696	1.00
20	ATOM 6.74	1349	CG	ASN	369	20.795	46.215	82.153	1.00
	ATOM 5.37	1350	OD1	ASN	369	21.544	45.516	82.817	1.00
	ATOM 4.83	1351	ND2	ASN	369	20.176	47.284	82.642	1.00
25	ATOM 6.12	1354	C	ASN	369	21.616	44.538	78.810	1.00
	ATOM 7.80	1355	O	ASN	369	20.531	43.978	78.607	1.00
30	ATOM 5.52	1356	N	ILE	370	22.594	44.558	77.910	1.00
	ATOM 4.05	1358	CA	ILE	370	22.513	43.778	76.702	1.00
	ATOM 5.37	1359	CB	ILE	370	22.806	44.620	75.434	1.00
35	ATOM 2.00	1360	CG2	ILE	370	22.870	43.667	74.213	1.00
	ATOM 2.00	1361	CG1	ILE	370	21.740	45.735	75.298	1.00
40	ATOM 2.00	1362	CD1	ILE	370	20.271	45.186	75.440	1.00
	ATOM 5.96	1363	C	ILE	370	23.630	42.766	76.896	1.00
	ATOM 5.26	1364	O	ILE	370	24.759	43.164	77.265	1.00
45	ATOM 6.77	1365	N	LEU	371	23.310	41.491	76.754	1.00
	ATOM 20.00	1366	H	LEU	371	22.404	41.249	76.524	1.00
50	ATOM 5.25	1367	CA	LEU	371	24.310	40.410	76.951	1.00
	ATOM 5.80	1368	CB	LEU	371	23.697	39.300	77.849	1.00
	ATOM 8.15	1369	CG	LEU	371	24.000	39.250	79.342	1.00
55	ATOM 8.54	1370	CD1	LEU	371	24.465	40.553	79.905	1.00
	ATOM 5.22	1371	CD2	LEU	371	22.953	38.500	80.228	1.00

	ATOM 6.17	1372	C	LEU	371	24.729	39.871	75.607	1.00
	ATOM 6.29	1373	O	LEU	371	23.922	39.893	74.657	1.00
5	ATOM 4.90	1374	N	VAL	372	25.999	39.457	75.505	1.00
	ATOM 6.66	1376	CA	VAL	372	26.568	38.935	74.275	1.00
10	ATOM 5.80	1377	CB	VAL	372	27.838	39.743	73.853	1.00
	ATOM 5.19	1378	CG1	VAL	372	28.259	39.341	72.425	1.00
	ATOM 7.50	1379	CG2	VAL	372	27.569	41.288	73.960	1.00
15	ATOM 4.98	1380	C	VAL	372	26.907	37.437	74.351	1.00
	ATOM 5.78	1381	O	VAL	372	27.554	36.988	75.265	1.00
20	ATOM 7.12	1382	N	SER	373	26.434	36.672	73.372	1.00
	ATOM 7.38	1384	CA	SER	373	26.662	35.231	73.320	1.00
	ATOM 7.48	1385	CB	SER	373	25.583	34.524	72.455	1.00
25	ATOM 5.48	1386	OG	SER	373	25.791	34.804	71.073	1.00
	ATOM 9.13	1388	C	SER	373	28.019	34.899	72.757	1.00
30	ATOM 8.18	1389	O	SER	373	28.723	35.753	72.197	1.00
	ATOM 8.64	1390	N	ASP	374	28.359	33.619	72.805	1.00
	ATOM 9.08	1392	CA	ASP	374	29.626	33.194	72.265	1.00
35	ATOM 9.32	1393	CB	ASP	374	29.854	31.727	72.644	1.00
	ATOM 11.97	1394	CG	ASP	374	28.900	30.809	71.944	1.00
40	ATOM 14.88	1395	OD1	ASP	374	27.709	31.136	71.917	1.00
	ATOM 15.30	1396	OD2	ASP	374	29.333	29.804	71.339	1.00
	ATOM 9.93	1397	C	ASP	374	29.678	33.397	70.740	1.00
45	ATOM 10.12	1398	O	ASP	374	30.752	33.485	70.159	1.00
	ATOM 7.98	1399	N	THR	375	28.519	33.487	70.070	1.00
50	ATOM 8.27	1401	CA	THR	375	28.509	33.720	68.613	1.00
	ATOM 8.75	1402	CB	THR	375	27.415	32.873	67.900	1.00
	ATOM 10.07	1403	OG1	THR	375	26.127	33.281	68.402	1.00
55	ATOM 7.62	1405	CG2	THR	375	27.566	31.382	68.169	1.00
	ATOM 8.45	1406	C	THR	375	28.289	35.213	68.258	1.00



	ATOM 8.09	1407	O	THR	375	27.968	35.566	67.137	1.00
	ATOM 8.22	1408	N	LEU	376	28.468	36.088	69.248	1.00
5	ATOM 9.33	1410	CA	LEU	376	28.307	37.521	69.080	1.00
	ATOM 8.40	1411	CB	LEU	376	29.290	38.110	68.046	1.00
10	ATOM 12.51	1412	CG	LEU	376	30.755	37.717	68.339	1.00
	ATOM 14.37	1413	CD1	LEU	376	31.719	38.480	67.387	1.00
	ATOM 14.45	1414	CD2	LEU	376	31.094	37.986	69.824	1.00
15	ATOM 9.24	1415	C	LEU	376	26.877	37.947	68.736	1.00
	ATOM 8.58	1416	O	LEU	376	26.691	38.800	67.869	1.00
20	ATOM 6.91	1417	N	SER	377	25.898	37.206	69.255	1.00
	ATOM 6.35	1419	CA	SER	377	24.507	37.607	69.085	1.00
	ATOM 3.06	1420	CB	SER	377	23.568	36.419	68.736	1.00
25	ATOM 7.61	1421	OG	SER	377	23.581	35.453	69.779	1.00
	ATOM 5.91	1423	C	SER	377	24.169	38.271	70.405	1.00
30	ATOM 5.71	1424	O	SER	377	24.836	37.965	71.457	1.00
	ATOM 4.65	1425	N	CYS	378	23.247	39.227	70.371	1.00
	ATOM 5.21	1427	CA	CYS	378	22.863	39.987	71.539	1.00
35	ATOM 6.09	1428	CB	CYS	378	22.851	41.492	71.171	1.00
	ATOM 13.86	1429	SG	CYS	378	24.490	42.098	70.729	1.00
40	ATOM 5.68	1430	C	CYS	378	21.476	39.652	72.034	1.00
	ATOM 3.41	1431	O	CYS	378	20.571	39.390	71.237	1.00
	ATOM 5.79	1432	N	LYS	379	21.299	39.790	73.344	1.00
45	ATOM 6.15	1434	CA	LYS	379	20.028	39.568	73.979	1.00
	ATOM 5.70	1435	CB	LYS	379	19.968	38.126	74.557	1.00
50	ATOM 5.57	1436	CG	LYS	379	20.024	37.069	73.428	1.00
	ATOM 7.05	1437	CD	LYS	379	19.695	35.653	73.895	1.00
	ATOM 8.56	1438	CE	LYS	379	19.965	34.712	72.713	1.00
55	ATOM 5.14	1439	NZ	LYS	379	19.168	33.450	72.774	1.00
	ATOM 6.59	1443	C	LYS	379	19.774	40.570	75.101	1.00

	ATOM 6.88	1444	O	LYS	379	20.688	41.019	75.798	1.00
	ATOM 6.01	1445	N	ILE	380	18.503	40.923	75.260	1.00
5	ATOM 4.05	1447	CA	ILE	380	18.088	41.817	76.308	1.00
	ATOM 4.23	1448	CB	ILE	380	16.676	42.413	75.983	1.00
10	ATOM 4.05	1449	CG2	ILE	380	16.211	43.363	77.114	1.00
	ATOM 7.39	1450	CG1	ILE	380	16.740	43.090	74.596	1.00
	ATOM 7.36	1451	CD1	ILE	380	15.437	43.643	74.134	1.00
15	ATOM 4.63	1452	C	ILE	380	18.052	41.096	77.637	1.00
	ATOM 4.54	1453	O	ILE	380	17.506	39.972	77.753	1.00
20	ATOM 3.68	1454	N	ALA	381	18.600	41.753	78.665	1.00
	ATOM 5.86	1456	CA	ALA	381	18.646	41.193	79.985	1.00
	ATOM 4.71	1457	CB	ALA	381	20.124	40.726	80.309	1.00
25	ATOM 6.27	1458	C	ALA	381	18.171	42.187	81.075	1.00
	ATOM 6.81	1459	O	ALA	381	17.897	43.391	80.826	1.00
30	ATOM 7.15	1460	N	ASP	382	18.143	41.662	82.287	1.00
	ATOM 6.71	1462	CA	ASP	382	17.753	42.393	83.495	1.00
	ATOM 9.17	1463	CB	ASP	382	18.777	43.460	83.844	1.00
35	ATOM 12.95	1464	CG	ASP	382	18.576	44.005	85.266	1.00
	ATOM 16.02	1465	OD1	ASP	382	19.508	44.625	85.778	1.00
40	ATOM 12.88	1466	OD2	ASP	382	17.515	43.747	85.882	1.00
	ATOM 8.02	1467	C	ASP	382	16.390	43.016	83.401	1.00
	ATOM 8.10	1468	O	ASP	382	16.241	44.204	83.113	1.00
45	ATOM 7.98	1469	N	PHE	383	15.384	42.209	83.699	1.00
	ATOM 8.46	1471	CA	PHE	383	13.996	42.627	83.655	1.00
50	ATOM 8.36	1472	CB	PHE	383	13.180	41.433	83.124	1.00
	ATOM 11.11	1473	CG	PHE	383	13.564	41.017	81.709	1.00
	ATOM 11.02	1474	CD1	PHE	383	12.949	41.607	80.607	1.00
55	ATOM 10.97	1475	CD2	PHE	383	14.592	40.111	81.489	1.00
	ATOM 11.05	1476	CE1	PHE	383	13.380	41.293	79.283	1.00

	ATOM 13.87	1477	CE2	PHE	383	15.013	39.802	80.166	1.00
	ATOM 9.97	1478	CZ	PHE	383	14.408	40.400	79.082	1.00
5	ATOM 8.84	1479	C	PHE	383	13.459	43.104	85.023	1.00
	ATOM 9.41	1480	O	PHE	383	12.281	43.006	85.287	1.00
10	ATOM 9.27	1481	N	GLY	384	14.351	43.566	85.891	1.00
	ATOM 9.87	1483	CA	GLY	384	13.939	44.014	87.221	1.00
	ATOM 11.29	1484	C	GLY	384	12.934	45.151	87.217	1.00
15	ATOM 8.71	1485	O	GLY	384	11.997	45.191	88.033	1.00
	ATOM 9.04	1486	N	LEU	385	13.131	46.103	86.303	1.00
20	ATOM 8.32	1488	CA	LEU	385	12.224	47.217	86.224	1.00
	ATOM 9.56	1489	CB	LEU	385	13.035	48.490	85.924	1.00
	ATOM 10.82	1490	CG	LEU	385	13.985	48.890	87.070	1.00
25	ATOM 13.00	1491	CD1	LEU	385	14.808	50.197	86.660	1.00
	ATOM 11.41	1492	CD2	LEU	385	13.197	49.130	88.366	1.00
30	ATOM 8.31	1493	C	LEU	385	11.131	47.037	85.199	1.00
	ATOM 7.36	1494	O	LEU	385	10.258	47.897	85.059	1.00
	ATOM 6.60	1495	N	ALA	386	11.194	45.927	84.457	1.00
35	ATOM 8.27	1497	CA	ALA	386	10.224	45.678	83.384	1.00
	ATOM 4.24	1498	CB	ALA	386	10.632	44.406	82.587	1.00
40	ATOM 9.72	1499	C	ALA	386	8.810	45.563	83.911	1.00
	ATOM 10.64	1500	O	ALA	386	8.602	44.969	84.987	1.00
	ATOM 9.50	1501	N	ARG	387	7.841	46.047	83.132	1.00
45	ATOM 11.62	1503	CA	ARG	387	6.430	46.084	83.531	1.00
	ATOM 11.18	1504	CB	ARG	387	6.080	47.473	84.106	1.00
50	ATOM 16.85	1505	CG	ARG	387	6.824	47.881	85.379	1.00
	ATOM 12.98	1506	CD	ARG	387	6.650	46.874	86.550	1.00
	ATOM 14.69	1507	NE	ARG	387	7.323	47.389	87.733	1.00
55	ATOM 14.33	1509	CZ	ARG	387	8.473	46.964	88.256	1.00
	ATOM 13.07	1510	NH1	ARG	387	9.178	45.951	87.724	1.00

	ATOM 14.51	1513	NH2	ARG	387	8.928	47.575	89.352	1.00
	ATOM 11.46	1516	C	ARG	387	5.446	45.880	82.394	1.00
5	ATOM 9.12	1517	O	ARG	387	5.706	46.265	81.267	1.00
	ATOM 12.72	1518	N	LEU	388	4.324	45.227	82.714	1.00
10	ATOM 15.05	1520	CA	LEU	388	3.248	45.031	81.775	1.00
	ATOM 14.65	1521	CB	LEU	388	2.345	43.844	82.196	1.00
	ATOM 14.87	1522	CG	LEU	388	1.060	43.555	81.375	1.00
15	ATOM 13.38	1523	CD1	LEU	388	1.351	43.464	79.893	1.00
	ATOM 14.82	1524	CD2	LEU	388	0.416	42.242	81.874	1.00
20	ATOM 17.48	1525	C	LEU	388	2.449	46.318	81.792	1.00
	ATOM 17.50	1526	O	LEU	388	2.098	46.839	82.847	1.00
	ATOM 20.52	1527	N	ILE	389	2.290	46.899	80.622	1.00
25	ATOM 24.70	1529	CA	ILE	389	1.560	48.120	80.420	1.00
	ATOM 26.16	1530	CB	ILE	389	2.178	48.835	79.198	1.00
30	ATOM 27.35	1531	CG2	ILE	389	1.254	49.885	78.627	1.00
	ATOM 26.34	1532	CG1	ILE	389	3.557	49.366	79.549	1.00
	ATOM 27.98	1533	CD1	ILE	389	3.586	50.174	80.857	1.00
35	ATOM 27.71	1534	C	ILE	389	0.061	47.828	80.162	1.00
	ATOM 28.01	1535	O	ILE	389	-0.322	47.340	79.089	1.00
40	ATOM 29.07	1536	N	GLU	390	-0.774	48.060	81.166	1.00
	ATOM 33.31	1538	CA	GLU	390	-2.221	47.851	81.036	1.00
	ATOM 35.64	1539	CB	GLU	390	-2.858	47.921	82.428	1.00
45	ATOM 38.85	1540	CG	GLU	390	-2.062	47.175	83.493	1.00
	ATOM 41.95	1541	CD	GLU	390	-2.423	45.698	83.589	1.00
50	ATOM 43.61	1542	OE1	GLU	390	-3.519	45.302	83.111	1.00
	ATOM 44.08	1543	OE2	GLU	390	-1.623	44.934	84.182	1.00
	ATOM 35.51	1544	C	GLU	390	-2.847	48.913	80.102	1.00
55	ATOM 34.45	1545	O	GLU	390	-3.491	48.588	79.107	1.00
	ATOM 36.04	1546	N	ASP	391	-2.695	50.191	80.464	1.00

	ATOM 37.62	1548	CA	ASP	391	-3.160	51.288	79.617	1.00
	ATOM 39.24	1549	CB	ASP	391	-3.698	52.456	80.450	1.00
5	ATOM 40.30	1550	CG	ASP	391	-5.195	52.345	80.720	1.00
	ATOM 41.07	1551	OD1	ASP	391	-5.570	52.062	81.881	1.00
10	ATOM 39.64	1552	OD2	ASP	391	-5.986	52.535	79.767	1.00
	ATOM 38.38	1553	C	ASP	391	-1.973	51.702	78.765	1.00
	ATOM 39.43	1554	O	ASP	391	-1.336	50.821	78.186	1.00
15	ATOM 36.06	1555	N	ALA	392	-1.635	52.976	78.645	1.00
	ATOM 35.60	1557	CA	ALA	392	-0.445	53.263	77.842	1.00
20	ATOM 36.17	1558	CB	ALA	392	-0.733	54.383	76.820	1.00
	ATOM 34.60	1559	C	ALA	392	0.806	53.611	78.653	1.00
	ATOM 33.20	1560	O	ALA	392	1.930	53.541	78.123	1.00
25	ATOM 33.89	1561	N	GLU	393	0.646	53.747	79.970	1.00
	ATOM 34.08	1563	CA	GLU	393	1.740	54.243	80.795	1.00
30	ATOM 36.56	1564	CB	GLU	393	1.482	55.762	80.859	1.00
	ATOM 41.00	1565	CG	GLU	393	2.562	56.693	81.308	1.00
	ATOM 43.97	1566	CD	GLU	393	2.130	58.166	81.130	1.00
35	ATOM 44.55	1567	OE1	GLU	393	1.076	58.563	81.679	1.00
	ATOM 45.51	1568	OE2	GLU	393	2.846	58.928	80.437	1.00
40	ATOM 32.38	1569	C	GLU	393	1.893	53.683	82.221	1.00
	ATOM 33.15	1570	O	GLU	393	0.924	53.346	82.896	1.00
	ATOM 29.72	1571	N	PTR	394	3.135	53.619	82.686	1.00
45	ATOM 28.19	1572	CA	PTR	394	3.450	53.199	84.044	1.00
	ATOM 26.93	1573	C	PTR	394	4.041	54.413	84.728	1.00
50	ATOM 26.68	1574	O	PTR	394	4.806	55.192	84.107	1.00
	ATOM 28.69	1575	CB	PTR	394	4.461	52.018	84.057	1.00
	ATOM 30.42	1576	CG	PTR	394	4.947	51.604	85.475	1.00
55	ATOM 31.83	1577	CD1	PTR	394	6.052	52.413	86.037	1.00
	ATOM 32.13	1578	CD2	PTR	394	4.438	50.580	86.206	1.00

	ATOM 34.02	1579	CE1	PTR	394	6.517	52.056	87.318	1.00
	ATOM 32.68	1580	CE2	PTR	394	4.903	50.219	87.487	1.00
5	ATOM 34.04	1581	CZ	PTR	394	5.976	50.995	88.021	1.00
	ATOM 36.71	1582	OH	PTR	394	6.505	50.679	89.298	1.00
10	ATOM 39.45	1583	P	PTR	394	6.117	49.669	90.441	1.00
	ATOM 39.10	1584	O1P	PTR	394	7.229	49.796	91.357	1.00
	ATOM 39.40	1585	O2P	PTR	394	5.920	48.150	90.168	1.00
15	ATOM 38.95	1586	O3P	PTR	394	4.923	50.270	90.894	1.00
	ATOM 26.11	1587	N	THR	395	3.590	54.670	85.950	1.00
20	ATOM 25.74	1589	CA	THR	395	4.088	55.800	86.722	1.00
	ATOM 24.73	1590	CB	THR	395	2.918	56.697	87.183	1.00
	ATOM 24.08	1591	OG1	THR	395	2.191	57.126	86.018	1.00
25	ATOM 25.09	1593	CG2	THR	395	3.438	57.927	87.934	1.00
	ATOM 25.68	1594	C	THR	395	4.860	55.306	87.920	1.00
30	ATOM 24.31	1595	O	THR	395	4.342	54.492	88.695	1.00
	ATOM 26.54	1596	N	ALA	396	6.140	55.668	87.984	1.00
	ATOM 28.10	1598	CA	ALA	396	6.989	55.278	89.098	1.00
35	ATOM 27.74	1599	CB	ALA	396	8.464	55.588	88.771	1.00
	ATOM 29.65	1600	C	ALA	396	6.547	56.073	90.312	1.00
40	ATOM 31.08	1601	O	ALA	396	5.877	57.104	90.150	1.00
	ATOM 31.81	1602	N	ARG	397	6.911	55.663	91.519	1.00
	ATOM 34.40	1604	CA	ARG	397	6.452	56.459	92.646	1.00
45	ATOM 35.57	1605	CB	ARG	397	5.970	55.570	93.780	1.00
	ATOM 38.18	1606	CG	ARG	397	6.985	55.307	94.848	1.00
50	ATOM 40.04	1607	CD	ARG	397	6.817	56.289	96.038	1.00
	ATOM 40.90	1608	NE	ARG	397	6.023	57.485	95.728	1.00
	ATOM 40.28	1610	CZ	ARG	397	4.703	57.582	95.897	1.00
55	ATOM 40.76	1611	NH1	ARG	397	4.018	56.556	96.373	1.00
	ATOM 40.55	1614	NH2	ARG	397	4.069	58.708	95.600	1.00

	ATOM	1617	C	ARG	397	7.435	57.547	93.051	1.00
	34.46								
	ATOM	1618	O	ARG	397	8.630	57.455	92.768	1.00
	34.83								
5	ATOM	1619	N	ALA	398	6.869	58.640	93.559	1.00
	35.64								
	ATOM	1621	CA	ALA	398	7.548	59.886	93.948	1.00
	35.34								
10	ATOM	1622	CB	ALA	398	6.905	60.503	95.211	1.00
	35.64								
	ATOM	1623	C	ALA	398	9.065	59.964	94.030	1.00
	34.51								
	ATOM	1624	O	ALA	398	9.687	60.755	93.296	1.00
	36.64								
15	ATOM	1625	N	GLY	399	9.679	59.176	94.902	1.00
	34.00								
	ATOM	1627	CA	GLY	399	11.124	59.263	95.047	1.00
	32.81								
20	ATOM	1628	C	GLY	399	11.992	58.359	94.192	1.00
	31.38								
	ATOM	1629	O	GLY	399	13.204	58.293	94.413	1.00
	31.87								
	ATOM	1630	N	ALA	400	11.390	57.672	93.227	1.00
	28.96								
25	ATOM	1632	CA	ALA	400	12.137	56.790	92.344	1.00
	27.32								
	ATOM	1633	CB	ALA	400	11.174	56.056	91.394	1.00
	26.93								
30	ATOM	1634	C	ALA	400	13.176	57.556	91.544	1.00
	25.78								
	ATOM	1635	O	ALA	400	12.899	58.602	90.986	1.00
	26.61								
	ATOM	1636	N	ALA	401	14.402	57.059	91.524	1.00
	25.56								
35	ATOM	1638	CA	ALA	401	15.449	57.735	90.786	1.00
	24.04								
	ATOM	1639	CB	ALA	401	16.606	58.096	91.755	1.00
	23.91								
40	ATOM	1640	C	ALA	401	15.933	56.851	89.634	1.00
	23.70								
	ATOM	1641	O	ALA	401	15.934	55.619	89.771	1.00
	24.65								
	ATOM	1642	N	PHE	402	16.272	57.449	88.495	1.00
	21.51								
45	ATOM	1644	CA	PHE	402	16.758	56.704	87.299	1.00
	20.26								
	ATOM	1645	CB	PHE	402	15.642	56.605	86.236	1.00
	19.45								
50	ATOM	1646	CG	PHE	402	14.362	56.003	86.750	1.00
	19.99								
	ATOM	1647	CD1	PHE	402	13.375	56.818	87.331	1.00
	18.30								
	ATOM	1648	CD2	PHE	402	14.174	54.624	86.739	1.00
	17.24								
55	ATOM	1649	CE1	PHE	402	12.214	56.264	87.885	1.00
	18.60								
	ATOM	1650	CE2	PHE	402	13.016	54.065	87.296	1.00
	18.88								

	ATOM 17.36	1651	CZ	PHE	402	12.035	54.890	87.881	1.00
	ATOM 19.72	1652	C	PHE	402	17.992	57.390	86.685	1.00
5	ATOM 19.51	1653	O	PHE	402	18.205	58.604	86.908	1.00
	ATOM 17.61	1654	N	PRO	403	18.841	56.633	85.948	1.00
10	ATOM 17.37	1655	CD	PRO	403	18.654	55.224	85.565	1.00
	ATOM 15.21	1656	CA	PRO	403	20.063	57.183	85.321	1.00
	ATOM 14.52	1657	CB	PRO	403	20.615	55.998	84.521	1.00
15	ATOM 16.35	1658	CG	PRO	403	20.064	54.794	85.246	1.00
	ATOM 14.03	1659	C	PRO	403	19.614	58.268	84.390	1.00
20	ATOM 12.56	1660	O	PRO	403	18.940	57.991	83.393	1.00
	ATOM 10.55	1661	N	ILE	404	19.955	59.506	84.727	1.00
	ATOM 9.23	1663	CA	ILE	404	19.548	60.642	83.932	1.00
25	ATOM 8.33	1664	CB	ILE	404	20.103	61.969	84.556	1.00
	ATOM 7.22	1665	CG2	ILE	404	19.856	63.198	83.614	1.00
30	ATOM 10.89	1666	CG1	ILE	404	19.428	62.279	85.898	1.00
	ATOM 15.61	1667	CD1	ILE	404	18.045	62.761	85.740	1.00
	ATOM 9.05	1668	C	ILE	404	19.958	60.551	82.463	1.00
35	ATOM 10.29	1669	O	ILE	404	19.168	60.830	81.581	1.00
	ATOM 7.51	1670	N	LYS	405	21.218	60.216	82.199	1.00
40	ATOM 7.74	1672	CA	LYS	405	21.697	60.166	80.805	1.00
	ATOM 7.91	1673	CB	LYS	405	23.199	59.976	80.757	1.00
	ATOM 9.19	1674	CG	LYS	405	24.009	61.154	81.381	1.00
45	ATOM 12.01	1675	CD	LYS	405	25.544	60.934	81.284	1.00
	ATOM 13.50	1676	CE	LYS	405	26.376	62.219	81.618	1.00
50	ATOM 14.45	1677	NZ	LYS	405	27.864	62.237	81.067	1.00
	ATOM 7.52	1681	C	LYS	405	20.997	59.190	79.840	1.00
	ATOM 5.32	1682	O	LYS	405	20.987	59.451	78.641	1.00
55	ATOM 7.25	1683	N	TRP	406	20.325	58.163	80.367	1.00
	ATOM 10.21	1685	CA	TRP	406	19.631	57.158	79.533	1.00



	ATOM 8.91	1686	CB	TRP	406	19.925	55.740	80.065	1.00
	ATOM 10.41	1687	CG	TRP	406	21.236	55.217	79.637	1.00
5	ATOM 8.35	1688	CD2	TRP	406	22.496	55.427	80.271	1.00
	ATOM 9.11	1689	CE2	TRP	406	23.476	54.814	79.452	1.00
10	ATOM 7.48	1690	CE3	TRP	406	22.905	56.078	81.433	1.00
	ATOM 10.63	1691	CD1	TRP	406	21.484	54.492	78.508	1.00
	ATOM 9.36	1692	NE1	TRP	406	22.822	54.251	78.391	1.00
15	ATOM 8.58	1694	CZ2	TRP	406	24.831	54.821	79.776	1.00
	ATOM 9.59	1695	CZ3	TRP	406	24.260	56.094	81.756	1.00
20	ATOM 8.77	1696	CH2	TRP	406	25.210	55.475	80.918	1.00
	ATOM 11.44	1697	C	TRP	406	18.106	57.292	79.568	1.00
	ATOM 12.49	1698	O	TRP	406	17.387	56.668	78.809	1.00
25	ATOM 11.51	1699	N	THR	407	17.617	58.073	80.511	1.00
	ATOM 12.67	1701	CA	THR	407	16.181	58.167	80.689	1.00
30	ATOM 12.98	1702	CB	THR	407	15.816	58.202	82.219	1.00
	ATOM 12.38	1703	OG1	THR	407	16.463	57.099	82.887	1.00
	ATOM 12.55	1705	CG2	THR	407	14.310	58.062	82.403	1.00
35	ATOM 12.08	1706	C	THR	407	15.504	59.303	79.948	1.00
	ATOM 11.81	1707	O	THR	407	16.003	60.425	79.927	1.00
40	ATOM 11.28	1708	N	ALA	408	14.300	59.017	79.445	1.00
	ATOM 10.42	1710	CA	ALA	408	13.510	59.970	78.686	1.00
	ATOM 8.62	1711	CB	ALA	408	12.267	59.252	78.095	1.00
45	ATOM 10.45	1712	C	ALA	408	13.090	61.129	79.566	1.00
	ATOM 10.17	1713	O	ALA	408	12.737	60.925	80.724	1.00
50	ATOM 12.06	1714	N	PRO	409	13.067	62.356	79.035	1.00
	ATOM 10.84	1715	CD	PRO	409	13.188	62.730	77.611	1.00
	ATOM 12.48	1716	CA	PRO	409	12.681	63.524	79.862	1.00
55	ATOM 10.99	1717	CB	PRO	409	12.645	64.690	78.844	1.00
	ATOM 9.44	1718	CG	PRO	409	13.517	64.202	77.667	1.00

	ATOM	1719	C	PRO	409	11.341	63.395	80.598	1.00
	13.51								
	ATOM	1720	O	PRO	409	11.274	63.733	81.780	1.00
	13.39								
5	ATOM	1721	N	GLU	410	10.309	62.825	79.950	1.00
	13.66								
	ATOM	1723	CA	GLU	410	9.008	62.686	80.601	1.00
	14.05								
10	ATOM	1724	CB	GLU	410	7.929	62.164	79.618	1.00
	14.74								
	ATOM	1725	CG	GLU	410	8.157	60.712	79.139	1.00
	14.11								
	ATOM	1726	CD	GLU	410	9.006	60.589	77.855	1.00
	13.92								
15	ATOM	1727	OE1	GLU	410	9.609	61.586	77.412	1.00
	17.79								
	ATOM	1728	OE2	GLU	410	9.055	59.487	77.268	1.00
	10.94								
	ATOM	1729	C	GLU	410	9.096	61.754	81.789	1.00
20	15.51								
	ATOM	1730	O	GLU	410	8.327	61.851	82.762	1.00
	15.28								
	ATOM	1731	N	ALA	411	10.070	60.839	81.740	1.00
	13.77								
25	ATOM	1733	CA	ALA	411	10.273	59.891	82.842	1.00
	13.86								
	ATOM	1734	CB	ALA	411	10.993	58.635	82.349	1.00
	11.70								
	ATOM	1735	C	ALA	411	11.038	60.542	83.979	1.00
30	15.69								
	ATOM	1736	O	ALA	411	10.800	60.260	85.160	1.00
	16.64								
	ATOM	1737	N	ILE	412	12.015	61.375	83.623	1.00
	17.12								
35	ATOM	1739	CA	ILE	412	12.777	62.111	84.637	1.00
	17.37								
	ATOM	1740	CB	ILE	412	13.973	62.899	83.992	1.00
	17.17								
	ATOM	1741	CG2	ILE	412	14.591	63.878	84.984	1.00
40	15.66								
	ATOM	1742	CG1	ILE	412	15.060	61.930	83.462	1.00
	17.50								
	ATOM	1743	CD1	ILE	412	16.132	62.644	82.494	1.00
	17.00								
45	ATOM	1744	C	ILE	412	11.843	63.117	85.337	1.00
	19.20								
	ATOM	1745	O	ILE	412	11.727	63.116	86.550	1.00
	20.37								
	ATOM	1746	N	ASN	413	11.091	63.865	84.522	1.00
50	19.09								
	ATOM	1748	CA	ASN	413	10.193	64.901	84.980	1.00
	22.25								
	ATOM	1749	CB	ASN	413	9.782	65.838	83.812	1.00
	20.96								
55	ATOM	1750	CG	ASN	413	10.949	66.645	83.252	1.00
	23.09								
	ATOM	1751	OD1	ASN	413	11.885	66.995	83.973	1.00
	24.79								

	ATOM	1752	ND2	ASN	413	10.902	66.945	81.961	1.00
	24.01								
	ATOM	1755	C	ASN	413	8.921	64.436	85.696	1.00
	22.36								
5	ATOM	1756	O	ASN	413	8.634	64.894	86.796	1.00
	25.00								
	ATOM	1757	N	TYR	414	8.177	63.525	85.073	1.00
	24.57								
10	ATOM	1759	CA	TYR	414	6.898	63.071	85.616	1.00
	24.50								
	ATOM	1760	CB	TYR	414	5.790	63.345	84.593	1.00
	24.84								
	ATOM	1761	CG	TYR	414	5.842	64.728	83.981	1.00
	26.70								
15	ATOM	1762	CD1	TYR	414	5.987	65.875	84.772	1.00
	28.30								
	ATOM	1763	CE1	TYR	414	6.144	67.142	84.198	1.00
	27.43								
20	ATOM	1764	CD2	TYR	414	5.821	64.896	82.605	1.00
	29.06								
	ATOM	1765	CE2	TYR	414	5.979	66.157	82.025	1.00
	29.86								
	ATOM	1766	CZ	TYR	414	6.131	67.273	82.833	1.00
	30.46								
25	ATOM	1767	OH	TYR	414	6.329	68.528	82.252	1.00
	32.92								
	ATOM	1769	C	TYR	414	6.825	61.638	86.113	1.00
	23.44								
30	ATOM	1770	O	TYR	414	5.803	61.207	86.625	1.00
	25.42								
	ATOM	1771	N	GLY	415	7.928	60.899	86.015	1.00
	22.95								
	ATOM	1773	CA	GLY	415	7.922	59.520	86.467	1.00
	21.12								
35	ATOM	1774	C	GLY	415	7.123	58.621	85.520	1.00
	18.78								
	ATOM	1775	O	GLY	415	6.916	57.437	85.802	1.00
	18.47								
40	ATOM	1776	N	THR	416	6.722	59.172	84.383	1.00
	18.49								
	ATOM	1778	CA	THR	416	5.939	58.434	83.396	1.00
	18.76								
	ATOM	1779	CB	THR	416	4.974	59.380	82.694	1.00
	19.70								
45	ATOM	1780	OG1	THR	416	5.715	60.494	82.206	1.00
	25.21								
	ATOM	1782	CG2	THR	416	3.918	59.920	83.703	1.00
	23.33								
	ATOM	1783	C	THR	416	6.793	57.704	82.348	1.00
50	15.58								
	ATOM	1784	O	THR	416	7.590	58.312	81.606	1.00
	15.63								
	ATOM	1785	N	PHE	417	6.559	56.397	82.263	1.00
	14.22								
55	ATOM	1787	CA	PHE	417	7.250	55.502	81.344	1.00
	12.90								
	ATOM	1788	CB	PHE	417	7.911	54.364	82.118	1.00
	12.43								

	ATOM 13.25	1789	CG	PHE	417	9.134	54.763	82.853	1.00
	ATOM 12.35	1790	CD1	PHE	417	9.057	55.226	84.174	1.00
5	ATOM 13.08	1791	CD2	PHE	417	10.383	54.601	82.258	1.00
	ATOM 14.79	1792	CE1	PHE	417	10.217	55.598	84.848	1.00
10	ATOM 13.12	1793	CE2	PHE	417	11.526	54.969	82.916	1.00
	ATOM 14.79	1794	CZ	PHE	417	11.449	55.437	84.228	1.00
	ATOM 12.95	1795	C	PHE	417	6.304	54.829	80.382	1.00
15	ATOM 11.58	1796	O	PHE	417	5.224	54.345	80.793	1.00
	ATOM 9.37	1797	N	THR	418	6.686	54.787	79.118	1.00
20	ATOM 9.20	1799	CA	THR	418	5.913	54.095	78.072	1.00
	ATOM 11.14	1800	CB	THR	418	5.073	55.056	77.147	1.00
	ATOM 12.07	1801	OG1	THR	418	5.959	55.769	76.311	1.00
25	ATOM 12.81	1803	CG2	THR	418	4.246	56.057	77.952	1.00
	ATOM 6.81	1804	C	THR	418	6.951	53.449	77.191	1.00
30	ATOM 8.90	1805	O	THR	418	8.154	53.657	77.387	1.00
	ATOM 6.90	1806	N	ILE	419	6.542	52.686	76.204	1.00
	ATOM 6.26	1808	CA	ILE	419	7.520	52.054	75.319	1.00
35	ATOM 6.92	1809	CB	ILE	419	6.799	51.100	74.313	1.00
	ATOM 8.94	1810	CG2	ILE	419	6.000	51.927	73.287	1.00
40	ATOM 5.41	1811	CG1	ILE	419	7.798	50.165	73.599	1.00
	ATOM 6.59	1812	CD1	ILE	419	8.540	49.171	74.529	1.00
	ATOM 8.26	1813	C	ILE	419	8.350	53.143	74.577	1.00
45	ATOM 5.34	1814	O	ILE	419	9.488	52.908	74.138	1.00
	ATOM 6.34	1815	N	LYS	420	7.806	54.364	74.521	1.00
50	ATOM 4.08	1817	CA	LYS	420	8.520	55.484	73.854	1.00
	ATOM 2.68	1818	CB	LYS	420	7.551	56.644	73.531	1.00
	ATOM 3.67	1819	CG	LYS	420	6.438	56.270	72.514	1.00
55	ATOM 5.03	1820	CD	LYS	420	6.999	55.671	71.209	1.00
	ATOM 6.23	1821	CE	LYS	420	5.953	55.772	70.043	1.00

	ATOM 7.07	1822	NZ	LYS	420	6.424	54.981	68.875	1.00
	ATOM 4.79	1826	C	LYS	420	9.676	55.986	74.697	1.00
5	ATOM 6.52	1827	O	LYS	420	10.576	56.650	74.186	1.00
	ATOM 4.97	1828	N	SER	421	9.629	55.723	76.004	0.84
10	ATOM 3.95	1830	CA	SER	421	10.729	56.084	76.893	0.84
	ATOM 5.49	1831	CB	SER	421	10.352	55.960	78.402	0.84
	ATOM 10.14	1832	OG	SER	421	9.094	56.468	78.668	0.84
15	ATOM 3.16	1834	C	SER	421	11.856	55.117	76.617	0.84
	ATOM 2.00	1835	O	SER	421	13.021	55.456	76.709	0.84
20	ATOM 4.50	1836	N	ASP	422	11.490	53.857	76.377	1.00
	ATOM 5.52	1838	CA	ASP	422	12.512	52.860	76.032	1.00
	ATOM 6.76	1839	CB	ASP	422	11.915	51.447	75.914	1.00
25	ATOM 9.09	1840	CG	ASP	422	11.665	50.773	77.266	1.00
	ATOM 4.99	1841	OD1	ASP	422	12.156	51.243	78.339	1.00
30	ATOM 9.59	1842	OD2	ASP	422	10.963	49.730	77.229	1.00
	ATOM 3.86	1843	C	ASP	422	13.142	53.267	74.694	1.00
	ATOM 2.91	1844	O	ASP	422	14.361	53.122	74.463	1.00
35	ATOM 4.15	1845	N	VAL	423	12.304	53.759	73.783	1.00
	ATOM 4.40	1847	CA	VAL	423	12.848	54.225	72.504	1.00
40	ATOM 5.29	1848	CB	VAL	423	11.735	54.766	71.550	1.00
	ATOM 5.10	1849	CG1	VAL	423	12.373	55.463	70.292	1.00
	ATOM 4.81	1850	CG2	VAL	423	10.844	53.619	71.040	1.00
45	ATOM 3.42	1851	C	VAL	423	13.944	55.267	72.711	1.00
	ATOM 3.11	1852	O	VAL	423	15.025	55.180	72.099	1.00
50	ATOM 4.34	1853	N	TRP	424	13.687	56.245	73.583	1.00
	ATOM 3.74	1855	CA	TRP	424	14.703	57.278	73.898	1.00
	ATOM 3.96	1856	CB	TRP	424	14.186	58.216	75.004	1.00
55	ATOM 4.52	1857	CG	TRP	424	15.148	59.270	75.367	1.00
	ATOM 4.48	1858	CD2	TRP	424	15.071	60.663	75.021	1.00

5	ATOM 5.86	1859	CE2	TRP	424	16.218	61.297	75.562	1.00
	ATOM 6.03	1860	CE3	TRP	424	14.137	61.450	74.307	1.00
	ATOM 4.73	1861	CD1	TRP	424	16.312	59.108	76.079	1.00
	ATOM 2.83	1862	NE1	TRP	424	16.952	60.329	76.206	1.00
	ATOM 5.37	1864	CZ2	TRP	424	16.470	62.682	75.422	1.00
10	ATOM 6.25	1865	CZ3	TRP	424	14.387	62.856	74.166	1.00
	ATOM 3.32	1866	CH2	TRP	424	15.546	63.436	74.725	1.00
	ATOM 5.05	1867	C	TRP	424	16.007	56.611	74.391	1.00
15	ATOM 6.14	1868	O	TRP	424	17.113	56.965	73.917	1.00
	ATOM 2.00	1869	N	SER	425	15.858	55.672	75.338	0.74
	ATOM 2.00	1871	CA	SER	425	16.988	54.915	75.894	0.74
	ATOM 2.95	1872	CB	SER	425	16.515	53.928	76.981	0.74
25	ATOM 2.82	1873	OG	SER	425	15.796	54.605	78.015	0.74
	ATOM 2.00	1875	C	SER	425	17.764	54.161	74.834	0.74
	ATOM 2.00	1876	O	SER	425	18.976	54.040	74.889	0.74
30	ATOM 2.05	1877	N	PHE	426	17.038	53.644	73.857	1.00
	ATOM 2.00	1879	CA	PHE	426	17.702	52.933	72.729	1.00
	ATOM 2.00	1880	CB	PHE	426	16.643	52.335	71.789	1.00
35	ATOM 3.82	1881	CG	PHE	426	17.235	51.508	70.669	1.00
	ATOM 3.04	1882	CD1	PHE	426	17.777	50.261	70.941	1.00
	ATOM 4.66	1883	CD2	PHE	426	17.279	51.995	69.371	1.00
45	ATOM 5.20	1884	CE1	PHE	426	18.346	49.516	69.918	1.00
	ATOM 5.66	1885	CE2	PHE	426	17.845	51.248	68.359	1.00
	ATOM 5.23	1886	CZ	PHE	426	18.386	50.010	68.650	1.00
	ATOM 2.84	1887	C	PHE	426	18.615	53.883	71.944	1.00
50	ATOM 2.64	1888	O	PHE	426	19.761	53.550	71.593	1.00
	ATOM 2.95	1889	N	GLY	427	18.148	55.108	71.716	1.00
	ATOM 2.56	1891	CA	GLY	427	19.003	56.051	70.984	1.00
55	ATOM 3.41	1892	C	GLY	427	20.309	56.268	71.740	1.00

	ATOM 5.01	1893	O	GLY	427	21.375	56.316	71.143	1.00
	ATOM 2.32	1894	N	ILE	428	20.218	56.398	73.062	1.00
5	ATOM 2.51	1896	CA	ILE	428	21.404	56.562	73.886	1.00
	ATOM 2.00	1897	CB	ILE	428	21.044	56.798	75.385	1.00
10	ATOM 4.15	1898	CG2	ILE	428	22.348	56.986	76.232	1.00
	ATOM 3.53	1899	CG1	ILE	428	20.075	58.015	75.551	1.00
	ATOM 3.34	1900	CD1	ILE	428	20.655	59.343	75.055	1.00
15	ATOM 3.22	1901	C	ILE	428	22.255	55.299	73.798	1.00
	ATOM 2.00	1902	O	ILE	428	23.488	55.352	73.695	1.00
20	ATOM 5.03	1903	N	LEU	429	21.588	54.146	73.849	1.00
	ATOM 4.88	1905	CA	LEU	429	22.300	52.873	73.737	1.00
	ATOM 5.84	1906	CB	LEU	429	21.303	51.682	73.883	1.00
25	ATOM 8.89	1907	CG	LEU	429	21.893	50.289	74.195	1.00
	ATOM 5.51	1908	CD1	LEU	429	20.796	49.309	74.701	1.00
30	ATOM 10.48	1909	CD2	LEU	429	22.507	49.742	72.917	1.00
	ATOM 3.30	1910	C	LEU	429	23.134	52.812	72.436	1.00
	ATOM 3.13	1911	O	LEU	429	24.248	52.361	72.435	1.00
35	ATOM 4.74	1912	N	LEU	430	22.571	53.297	71.326	1.00
	ATOM 5.38	1914	CA	LEU	430	23.271	53.350	70.055	1.00
40	ATOM 4.05	1915	CB	LEU	430	22.407	53.988	68.973	1.00
	ATOM 4.57	1916	CG	LEU	430	21.146	53.206	68.574	1.00
	ATOM 5.38	1917	CD1	LEU	430	20.360	54.072	67.628	1.00
45	ATOM 5.08	1918	CD2	LEU	430	21.476	51.819	67.911	1.00
	ATOM 3.87	1919	C	LEU	430	24.592	54.116	70.130	1.00
50	ATOM 4.14	1920	O	LEU	430	25.534	53.745	69.411	1.00
	ATOM 3.19	1921	N	THR	431	24.627	55.186	70.943	1.00
	ATOM 4.13	1923	CA	THR	431	25.866	55.948	71.123	1.00
55	ATOM 6.10	1924	CB	THR	431	25.674	57.329	71.881	1.00
	ATOM 4.45	1925	OG1	THR	431	25.431	57.085	73.283	1.00

	ATOM 3.43	1927	CG2	THR	431	24.482	58.149	71.271	1.00
	ATOM 5.42	1928	C	THR	431	26.864	55.068	71.868	1.00
5	ATOM 5.41	1929	O	THR	431	28.063	55.066	71.547	1.00
	ATOM 5.58	1930	N	GLU	432	26.376	54.264	72.816	1.00
10	ATOM 5.91	1932	CA	GLU	432	27.294	53.343	73.514	1.00
	ATOM 4.77	1933	CB	GLU	432	26.601	52.587	74.663	1.00
	ATOM 6.02	1934	CG	GLU	432	26.024	53.501	75.738	1.00
15	ATOM 8.30	1935	CD	GLU	432	25.312	52.690	76.824	1.00
	ATOM 7.55	1936	OE1	GLU	432	24.124	52.346	76.656	1.00
20	ATOM 8.54	1937	OE2	GLU	432	25.984	52.327	77.812	1.00
	ATOM 4.75	1938	C	GLU	432	27.876	52.314	72.562	1.00
	ATOM 7.57	1939	O	GLU	432	29.063	51.880	72.721	1.00
25	ATOM 4.02	1940	N	ILE	433	27.067	51.895	71.580	1.00
	ATOM 5.75	1942	CA	ILE	433	27.573	50.891	70.640	1.00
30	ATOM 5.46	1943	CB	ILE	433	26.434	50.278	69.789	1.00
	ATOM 7.63	1944	CG2	ILE	433	27.002	49.491	68.557	1.00
	ATOM 3.44	1945	CG1	ILE	433	25.621	49.330	70.667	1.00
35	ATOM 3.43	1946	CD1	ILE	433	24.268	48.956	70.064	1.00
	ATOM 7.58	1947	C	ILE	433	28.662	51.466	69.766	1.00
40	ATOM 5.81	1948	O	ILE	433	29.785	50.959	69.716	1.00
	ATOM 8.45	1949	N	VAL	434	28.379	52.645	69.211	1.00
	ATOM 10.29	1951	CA	VAL	434	29.334	53.291	68.302	1.00
45	ATOM 12.33	1952	CB	VAL	434	28.574	54.316	67.398	1.00
	ATOM 10.36	1953	CG1	VAL	434	28.572	55.699	68.013	1.00
50	ATOM 15.29	1954	CG2	VAL	434	29.127	54.289	65.987	1.00
	ATOM 10.86	1955	C	VAL	434	30.619	53.833	68.958	1.00
	ATOM 11.27	1956	O	VAL	434	31.671	53.905	68.328	1.00
55	ATOM 9.46	1957	N	THR	435	30.578	54.184	70.235	1.00
	ATOM 10.41	1959	CA	THR	435	31.790	54.635	70.917	1.00



	ATOM 9.86	1960	CB	THR	435	31.459	55.722	71.927	1.00
	ATOM 10.21	1961	OG1	THR	435	30.628	55.153	72.922	1.00
5	ATOM 5.06	1963	CG2	THR	435	30.747	56.926	71.238	1.00
	ATOM 11.33	1964	C	THR	435	32.500	53.497	71.701	1.00
10	ATOM 9.52	1965	O	THR	435	33.333	53.724	72.552	1.00
	ATOM 10.76	1966	N	HIS	436	32.095	52.255	71.426	1.00
	ATOM 12.16	1968	CA	HIS	436	32.660	51.108	72.117	1.00
15	ATOM 14.36	1969	CB	HIS	436	34.092	50.771	71.622	1.00
	ATOM 17.82	1970	CG	HIS	436	34.138	50.340	70.189	1.00
20	ATOM 18.01	1971	CD2	HIS	436	34.040	51.008	69.028	1.00
	ATOM 17.95	1972	ND1	HIS	436	34.278	48.984	69.811	1.00
	ATOM 16.78	1974	CE1	HIS	436	34.249	48.894	68.515	1.00
25	ATOM 18.47	1975	NE2	HIS	436	34.107	50.118	67.985	1.00
	ATOM 10.66	1977	C	HIS	436	32.574	51.200	73.612	1.00
30	ATOM 12.29	1978	O	HIS	436	33.544	51.002	74.345	1.00
	ATOM 8.50	1979	N	GLY	437	31.402	51.596	74.071	1.00
	ATOM 9.22	1981	CA	GLY	437	31.165	51.663	75.495	1.00
35	ATOM 8.30	1982	C	GLY	437	31.423	52.924	76.259	1.00
	ATOM 10.50	1983	O	GLY	437	31.442	52.845	77.479	1.00
40	ATOM 4.33	1984	N	ARG	438	31.604	54.072	75.605	0.58
	ATOM 5.30	1986	CA	ARG	438	31.826	55.340	76.342	0.58
	ATOM 5.27	1987	CB	ARG	438	32.316	56.432	75.375	0.58
45	ATOM 10.45	1988	CG	ARG	438	32.741	57.754	76.040	0.58
	ATOM 12.08	1989	CD	ARG	438	33.316	58.745	75.006	0.58
50	ATOM 14.66	1990	NE	ARG	438	34.065	59.847	75.639	0.58
	ATOM 14.73	1992	CZ	ARG	438	34.540	60.895	74.970	0.58
	ATOM 16.77	1993	NH1	ARG	438	34.337	60.986	73.670	0.58
55	ATOM 15.37	1996	NH2	ARG	438	35.231	61.844	75.583	0.58
	ATOM 3.96	1999	C	ARG	438	30.553	55.845	77.024	0.58

	ATOM 2.00	2000	O	ARG	438	29.458	55.559	76.577	0.58
	ATOM 7.07	2001	N	ILE	439	30.708	56.622	78.091	1.00
5	ATOM 4.89	2003	CA	ILE	439	29.595	57.199	78.814	1.00
	ATOM 10.20	2004	CB	ILE	439	30.048	57.865	80.184	1.00
10	ATOM 8.12	2005	CG2	ILE	439	28.834	58.496	80.938	1.00
	ATOM 12.62	2006	CG1	ILE	439	30.556	56.790	81.179	1.00
	ATOM 13.55	2007	CD1	ILE	439	31.474	57.384	82.326	1.00
15	ATOM 4.63	2008	C	ILE	439	28.975	58.227	77.894	1.00
	ATOM 5.97	2009	O	ILE	439	29.710	58.973	77.199	1.00
20	ATOM 2.00	2010	N	PRO	440	27.646	58.251	77.788	0.43
	ATOM 2.00	2011	CD	PRO	440	26.726	57.301	78.423	0.43
	ATOM 2.00	2012	CA	PRO	440	26.959	59.219	76.917	0.43
25	ATOM 2.00	2013	CB	PRO	440	25.487	58.794	77.006	0.43
	ATOM 2.00	2014	CG	PRO	440	25.386	57.918	78.191	0.43
30	ATOM 2.00	2015	C	PRO	440	27.155	60.671	77.359	0.43
	ATOM 2.00	2016	O	PRO	440	27.480	60.906	78.521	0.43
	ATOM 4.34	2017	N	TYR	441	26.950	61.622	76.415	1.00
35	ATOM 5.14	2019	CA	TYR	441	27.095	63.053	76.690	1.00
	ATOM 3.68	2020	CB	TYR	441	26.031	63.549	77.709	1.00
40	ATOM 4.65	2021	CG	TYR	441	24.582	63.337	77.265	1.00
	ATOM 3.69	2022	CD1	TYR	441	24.002	64.215	76.326	1.00
	ATOM 4.62	2023	CE1	TYR	441	22.697	64.058	75.898	1.00
45	ATOM 4.82	2024	CD2	TYR	441	23.804	62.283	77.756	1.00
	ATOM 3.03	2025	CE2	TYR	441	22.478	62.117	77.334	1.00
50	ATOM 2.94	2026	CZ	TYR	441	21.941	63.015	76.402	1.00
	ATOM 2.71	2027	OH	TYR	441	20.669	62.919	75.948	1.00
	ATOM 9.44	2029	C	TYR	441	28.467	63.298	77.309	1.00
55	ATOM 10.66	2030	O	TYR	441	28.565	63.832	78.399	1.00
	ATOM 11.17	2031	N	PRO	442	29.540	62.948	76.597	1.00

5	ATOM 12.12	2032	CD	PRO	442	29.574	62.539	75.175	1.00
	ATOM 12.86	2033	CA	PRO	442	30.906	63.125	77.120	1.00
	ATOM 13.07	2034	CB	PRO	442	31.783	62.839	75.897	1.00
	ATOM 11.80	2035	CG	PRO	442	30.897	61.871	75.065	1.00
	ATOM 11.90	2036	C	PRO	442	31.234	64.500	77.708	1.00
10	ATOM 12.98	2037	O	PRO	442	30.916	65.527	77.134	1.00
	ATOM 13.61	2038	N	GLY	443	31.778	64.492	78.917	1.00
	ATOM 13.89	2040	CA	GLY	443	32.196	65.743	79.530	1.00
15	ATOM 13.55	2041	C	GLY	443	31.127	66.578	80.150	1.00
	ATOM 13.44	2042	O	GLY	443	31.388	67.706	80.537	1.00
	ATOM 11.91	2043	N	MET	444	29.914	66.029	80.245	1.00
20	ATOM 10.61	2045	CA	MET	444	28.784	66.748	80.829	1.00
	ATOM 12.90	2046	CB	MET	444	27.659	66.840	79.774	1.00
	ATOM 10.70	2047	CG	MET	444	28.124	67.442	78.447	1.00
25	ATOM 14.53	2048	SD	MET	444	26.904	67.495	77.084	1.00
	ATOM 12.34	2049	CE	MET	444	25.403	68.138	77.901	1.00
	ATOM 11.01	2050	C	MET	444	28.243	66.060	82.080	1.00
30	ATOM 9.30	2051	O	MET	444	28.173	64.826	82.151	1.00
	ATOM 9.72	2052	N	THR	445	27.813	66.864	83.048	1.00
	ATOM 9.39	2054	CA	THR	445	27.207	66.359	84.241	1.00
35	ATOM 12.53	2055	CB	THR	445	27.354	67.395	85.397	1.00
	ATOM 9.54	2056	OG1	THR	445	26.680	68.625	85.023	1.00
	ATOM 10.72	2058	CG2	THR	445	28.837	67.653	85.703	1.00
40	ATOM 9.34	2059	C	THR	445	25.714	66.202	83.969	1.00
	ATOM 6.96	2060	O	THR	445	25.201	66.651	82.926	1.00
	ATOM 8.17	2061	N	ASN	446	24.991	65.596	84.900	1.00
45	ATOM 10.10	2063	CA	ASN	446	23.549	65.439	84.723	1.00
	ATOM 11.33	2064	CB	ASN	446	22.950	64.647	85.888	1.00
	ATOM 12.27	2065	CG	ASN	446	23.261	63.145	85.810	1.00

5	ATOM 13.46	2066	OD1	ASN	446	23.738	62.652	84.779	1.00
	ATOM 10.41	2067	ND2	ASN	446	22.993	62.421	86.900	1.00
	ATOM 10.86	2070	C	ASN	446	22.821	66.786	84.545	1.00
	ATOM 10.92	2071	O	ASN	446	21.933	66.890	83.708	1.00
10	ATOM 10.33	2072	N	PRO	447	23.140	67.806	85.381	1.00
	ATOM 11.30	2073	CD	PRO	447	23.818	67.712	86.697	1.00
	ATOM 10.42	2074	CA	PRO	447	22.481	69.119	85.247	1.00
	ATOM 12.22	2075	CB	PRO	447	23.137	69.936	86.370	1.00
15	ATOM 12.86	2076	CG	PRO	447	23.247	68.905	87.456	1.00
	ATOM 8.80	2077	C	PRO	447	22.742	69.739	83.869	1.00
	ATOM 9.82	2078	O	PRO	447	21.859	70.383	83.293	1.00
	ATOM 8.54	2079	N	GLU	448	23.968	69.603	83.363	1.00
20	ATOM 8.10	2081	CA	GLU	448	24.300	70.112	82.029	1.00
	ATOM 9.79	2082	CB	GLU	448	25.784	69.950	81.719	1.00
	ATOM 13.23	2083	CG	GLU	448	26.674	71.007	82.384	1.00
	ATOM 12.90	2084	CD	GLU	448	28.125	70.748	82.148	1.00
25	ATOM 16.44	2085	OE1	GLU	448	28.746	71.586	81.484	1.00
	ATOM 14.02	2086	OE2	GLU	448	28.656	69.679	82.576	1.00
	ATOM 7.54	2087	C	GLU	448	23.501	69.384	80.958	1.00
	ATOM 6.85	2088	O	GLU	448	23.021	69.984	79.999	1.00
30	ATOM 6.85	2089	N	VAL	449	23.327	68.075	81.151	1.00
	ATOM 6.66	2091	CA	VAL	449	22.532	67.273	80.174	1.00
	ATOM 4.93	2092	CB	VAL	449	22.555	65.758	80.561	1.00
	ATOM 9.91	2093	CG1	VAL	449	21.562	64.982	79.702	1.00
35	ATOM 5.99	2094	CG2	VAL	449	23.934	65.187	80.366	1.00
	ATOM 5.68	2095	C	VAL	449	21.078	67.790	80.114	1.00
	ATOM 4.79	2096	O	VAL	449	20.548	68.105	79.043	1.00
	ATOM 2.00	2097	N	ILE	450	20.499	68.001	81.292	0.60
40	ATOM 3.50	2099	CA	ILE	450	19.152	68.541	81.399	0.60

	ATOM 4.11	2100	CB	ILE	450	18.737	68.594	82.909	0.60
	ATOM 2.00	2101	CG2	ILE	450	17.459	69.395	83.108	0.60
5	ATOM 2.00	2102	CG1	ILE	450	18.574	67.171	83.431	0.60
	ATOM 6.46	2103	CD1	ILE	450	18.374	67.130	84.893	0.60
10	ATOM 3.55	2104	C	ILE	450	19.050	69.938	80.778	0.60
	ATOM 2.00	2105	O	ILE	450	18.145	70.230	79.999	0.60
	ATOM 6.56	2106	N	GLN	451	20.020	70.787	81.097	1.00
15	ATOM 9.94	2108	CA	GLN	451	20.075	72.158	80.571	1.00
	ATOM 13.77	2109	CB	GLN	451	21.341	72.877	81.075	1.00
20	ATOM 20.58	2110	CG	GLN	451	21.464	73.121	82.565	1.00
	ATOM 25.24	2111	CD	GLN	451	22.831	73.739	82.890	1.00
	ATOM 26.69	2112	OE1	GLN	451	23.347	74.549	82.087	1.00
25	ATOM 24.98	2113	NE2	GLN	451	23.453	73.326	83.996	1.00
	ATOM 8.45	2116	C	GLN	451	20.101	72.153	79.034	1.00
30	ATOM 8.08	2117	O	GLN	451	19.308	72.814	78.354	1.00
	ATOM 8.61	2118	N	ASN	452	20.995	71.335	78.488	1.00
	ATOM 9.38	2120	CA	ASN	452	21.107	71.178	77.038	1.00
35	ATOM 10.95	2121	CB	ASN	452	22.292	70.283	76.654	1.00
	ATOM 13.96	2122	CG	ASN	452	23.612	71.048	76.615	1.00
40	ATOM 18.85	2123	OD1	ASN	452	24.486	70.740	75.827	1.00
	ATOM 16.27	2124	ND2	ASN	452	23.768	71.995	77.491	1.00
	ATOM 9.06	2127	C	ASN	452	19.856	70.626	76.392	1.00
45	ATOM 8.73	2128	O	ASN	452	19.417	71.113	75.327	1.00
	ATOM 8.56	2129	N	LEU	453	19.287	69.588	76.984	1.00
50	ATOM 7.19	2131	CA	LEU	453	18.080	69.022	76.418	1.00
	ATOM 7.76	2132	CB	LEU	453	17.612	67.814	77.228	1.00
	ATOM 6.00	2133	CG	LEU	453	18.532	66.609	77.142	1.00
55	ATOM 9.63	2134	CD1	LEU	453	17.995	65.564	78.071	1.00
	ATOM 6.63	2135	CD2	LEU	453	18.615	66.104	75.679	1.00

	ATOM 8.52	2136	C	LEU	453	16.953	70.050	76.352	1.00
	ATOM 9.41	2137	O	LEU	453	16.224	70.124	75.364	1.00
5	ATOM 7.13	2138	N	GLU	454	16.787	70.812	77.437	1.00
	ATOM 9.15	2140	CA	GLU	454	15.724	71.802	77.494	1.00
10	ATOM 10.57	2141	CB	GLU	454	15.458	72.265	78.953	1.00
	ATOM 14.54	2142	CG	GLU	454	14.804	71.090	79.746	1.00
	ATOM 18.39	2143	CD	GLU	454	14.678	71.302	81.259	1.00
15	ATOM 19.85	2144	OE1	GLU	454	15.251	72.277	81.791	1.00
	ATOM 18.65	2145	OE2	GLU	454	14.003	70.466	81.910	1.00
20	ATOM 8.75	2146	C	GLU	454	15.876	72.937	76.516	1.00
	ATOM 9.11	2147	O	GLU	454	14.915	73.603	76.173	1.00
	ATOM 8.42	2148	N	ARG	455	17.102	73.132	76.038	1.00
25	ATOM 9.20	2150	CA	ARG	455	17.381	74.148	75.013	1.00
	ATOM 10.05	2151	CB	ARG	455	18.884	74.503	74.997	1.00
30	ATOM 12.72	2152	CG	ARG	455	19.347	75.201	76.209	1.00
	ATOM 13.32	2153	CD	ARG	455	20.794	75.621	76.012	1.00
	ATOM 12.24	2154	NE	ARG	455	20.862	76.749	75.073	1.00
35	ATOM 11.80	2156	CZ	ARG	455	21.999	77.383	74.764	1.00
	ATOM 6.86	2157	NH1	ARG	455	23.161	76.974	75.279	1.00
40	ATOM 7.34	2160	NH2	ARG	455	21.932	78.547	74.123	1.00
	ATOM 9.77	2163	C	ARG	455	17.062	73.632	73.619	1.00
	ATOM 9.32	2164	O	ARG	455	17.047	74.409	72.682	1.00
45	ATOM 8.29	2165	N	GLY	456	16.814	72.318	73.483	1.00
	ATOM 7.45	2167	CA	GLY	456	16.551	71.743	72.161	1.00
50	ATOM 5.78	2168	C	GLY	456	17.785	70.997	71.638	1.00
	ATOM 4.51	2169	O	GLY	456	17.776	70.442	70.546	1.00
	ATOM 5.91	2170	N	TYR	457	18.884	71.066	72.356	1.00
55	ATOM 5.76	2172	CA	TYR	457	20.077	70.333	71.918	1.00
	ATOM 5.55	2173	CB	TYR	457	21.320	70.786	72.695	1.00

	ATOM 4.70	2174	CG	TYR	457	21.816	72.215	72.470	1.00
	ATOM 4.74	2175	CD1	TYR	457	21.368	72.999	71.395	1.00
5	ATOM 5.80	2176	CE1	TYR	457	21.910	74.291	71.166	1.00
	ATOM 9.15	2177	CD2	TYR	457	22.798	72.744	73.300	1.00
10	ATOM 7.40	2178	CE2	TYR	457	23.348	73.999	73.075	1.00
	ATOM 6.58	2179	CZ	TYR	457	22.905	74.770	72.012	1.00
	ATOM 6.87	2180	OH	TYR	457	23.498	76.015	71.849	1.00
15	ATOM 5.84	2182	C	TYR	457	19.914	68.838	72.234	1.00
	ATOM 2.95	2183	O	TYR	457	19.059	68.474	73.058	1.00
20	ATOM 7.21	2184	N	ARG	458	20.689	67.996	71.542	1.00
	ATOM 5.55	2186	CA	ARG	458	20.741	66.581	71.849	1.00
	ATOM 5.01	2187	CB	ARG	458	20.055	65.757	70.738	1.00
25	ATOM 3.95	2188	CG	ARG	458	18.511	65.956	70.669	1.00
	ATOM 4.69	2189	CD	ARG	458	17.803	65.576	71.993	1.00
30	ATOM 4.48	2190	NE	ARG	458	16.318	65.689	71.959	1.00
	ATOM 8.02	2192	CZ	ARG	458	15.581	66.711	72.411	1.00
	ATOM 9.83	2193	NH1	ARG	458	16.148	67.790	72.966	1.00
35	ATOM 6.51	2196	NH2	ARG	458	14.256	66.681	72.293	1.00
	ATOM 6.38	2199	C	ARG	458	22.222	66.237	71.976	1.00
40	ATOM 5.47	2200	O	ARG	458	23.090	67.126	71.790	1.00
	ATOM 3.53	2201	N	MET	459	22.557	64.988	72.283	1.00
	ATOM 4.64	2203	CA	MET	459	23.989	64.633	72.379	1.00
45	ATOM 4.43	2204	CB	MET	459	24.168	63.117	72.616	1.00
	ATOM 5.73	2205	CG	MET	459	25.529	62.769	73.161	1.00
50	ATOM 8.91	2206	SD	MET	459	25.675	60.947	73.371	1.00
	ATOM 8.80	2207	CE	MET	459	24.195	60.627	74.333	1.00
	ATOM 4.68	2208	C	MET	459	24.762	64.997	71.127	1.00
55	ATOM 4.18	2209	O	MET	459	24.285	64.806	70.001	1.00
	ATOM 3.91	2210	N	VAL	460	25.947	65.555	71.326	1.00

	ATOM 6.53	2212	CA	VAL	460	26.849	65.922	70.239	1.00
	ATOM 7.54	2213	CB	VAL	460	28.194	66.479	70.848	1.00
5	ATOM 8.61	2214	CG1	VAL	460	29.230	66.668	69.784	1.00
	ATOM 7.16	2215	CG2	VAL	460	27.953	67.745	71.699	1.00
10	ATOM 6.37	2216	C	VAL	460	27.220	64.635	69.425	1.00
	ATOM 6.28	2217	O	VAL	460	27.348	63.597	69.993	1.00
	ATOM 5.72	2218	N	ARG	461	27.293	64.705	68.089	1.00
15	ATOM 8.25	2220	CA	ARG	461	27.713	63.538	67.294	1.00
	ATOM 8.12	2221	CB	ARG	461	28.107	63.962	65.877	1.00
20	ATOM 7.53	2222	CG	ARG	461	26.973	64.465	65.084	1.00
	ATOM 10.16	2223	CD	ARG	461	27.462	65.018	63.756	1.00
	ATOM 7.37	2224	NE	ARG	461	26.283	65.256	62.928	1.00
25	ATOM 8.20	2226	CZ	ARG	461	25.641	66.421	62.865	1.00
	ATOM 7.00	2227	NH1	ARG	461	26.053	67.488	63.601	1.00
30	ATOM 3.52	2230	NH2	ARG	461	24.632	66.538	62.011	1.00
	ATOM 9.83	2233	C	ARG	461	28.937	62.826	67.834	1.00
	ATOM 8.35	2234	O	ARG	461	29.988	63.453	68.008	1.00
35	ATOM 10.04	2235	N	PRO	462	28.823	61.513	68.167	1.00
	ATOM 8.96	2236	CD	PRO	462	27.623	60.680	68.322	1.00
40	ATOM 11.37	2237	CA	PRO	462	30.016	60.825	68.694	1.00
	ATOM 7.39	2238	CB	PRO	462	29.494	59.402	69.016	1.00
	ATOM 8.81	2239	CG	PRO	462	28.069	59.631	69.369	1.00
45	ATOM 12.74	2240	C	PRO	462	31.052	60.732	67.606	1.00
	ATOM 10.85	2241	O	PRO	462	30.740	60.793	66.416	1.00
50	ATOM 17.47	2242	N	ASP	463	32.300	60.581	68.029	1.00
	ATOM 20.96	2244	CA	ASP	463	33.402	60.432	67.105	1.00
	ATOM 25.18	2245	CB	ASP	463	34.736	60.286	67.870	1.00
55	ATOM 28.15	2246	CG	ASP	463	35.087	61.512	68.707	1.00
	ATOM 29.78	2247	OD1	ASP	463	34.495	62.597	68.500	1.00



	ATOM 30.25	2248	OD2	ASP	463	35.975	61.388	69.582	1.00
	ATOM 21.24	2249	C	ASP	463	33.178	59.198	66.262	1.00
5	ATOM 21.61	2250	O	ASP	463	32.636	58.191	66.749	1.00
	ATOM 22.32	2251	N	ASN	464	33.463	59.319	64.973	1.00
10	ATOM 23.87	2253	CA	ASN	464	33.301	58.206	64.051	1.00
	ATOM 26.43	2254	CB	ASN	464	34.451	57.226	64.261	1.00
	ATOM 28.16	2255	CG	ASN	464	35.782	57.834	63.850	1.00
15	ATOM 32.70	2256	OD1	ASN	464	36.029	58.025	62.660	1.00
	ATOM 29.64	2257	ND2	ASN	464	36.591	58.236	64.820	1.00
20	ATOM 22.09	2260	C	ASN	464	31.918	57.522	64.034	1.00
	ATOM 22.34	2261	O	ASN	464	31.774	56.284	63.968	1.00
	ATOM 18.35	2262	N	CYS	465	30.885	58.347	64.139	1.00
25	ATOM 13.90	2264	CA	CYS	465	29.505	57.849	64.079	1.00
	ATOM 12.88	2265	CB	CYS	465	28.656	58.478	65.196	1.00
30	ATOM 13.96	2266	SG	CYS	465	26.904	58.015	65.072	1.00
	ATOM 14.12	2267	C	CYS	465	28.941	58.185	62.702	1.00
	ATOM 13.81	2268	O	CYS	465	29.052	59.332	62.251	1.00
35	ATOM 12.80	2269	N	PRO	466	28.501	57.172	61.945	1.00
	ATOM 13.81	2270	CD	PRO	466	28.509	55.743	62.333	1.00
40	ATOM 11.16	2271	CA	PRO	466	27.930	57.356	60.609	1.00
	ATOM 12.22	2272	CB	PRO	466	27.467	55.945	60.245	1.00
	ATOM 11.55	2273	CG	PRO	466	28.424	55.059	61.038	1.00
45	ATOM 8.89	2274	C	PRO	466	26.735	58.304	60.781	1.00
	ATOM 5.97	2275	O	PRO	466	25.944	58.167	61.759	1.00
50	ATOM 5.38	2276	N	GLU	467	26.651	59.303	59.900	1.00
	ATOM 5.74	2278	CA	GLU	467	25.556	60.286	60.003	1.00
	ATOM 5.77	2279	CB	GLU	467	25.705	61.399	58.937	1.00
55	ATOM 7.30	2280	CG	GLU	467	24.667	62.547	59.108	1.00
	ATOM 8.60	2281	CD	GLU	467	24.772	63.304	60.430	1.00

5	ATOM 12.73	2282	OE1	GLU	467	23.866	64.111	60.736	1.00
	ATOM 8.79	2283	OE2	GLU	467	25.779	63.148	61.157	1.00
	ATOM 3.94	2284	C	GLU	467	24.172	59.647	59.928	1.00
	ATOM 2.54	2285	O	GLU	467	23.238	60.090	60.610	1.00
10	ATOM 2.00	2286	N	GLU	468	24.018	58.578	59.144	0.51
	ATOM 2.00	2288	CA	GLU	468	22.731	57.898	59.098	0.51
	ATOM 2.00	2289	CB	GLU	468	22.777	56.699	58.155	0.51
	ATOM 2.00	2290	CG	GLU	468	22.728	57.056	56.720	0.51
15	ATOM 4.73	2291	CD	GLU	468	23.102	55.891	55.877	0.51
	ATOM 6.19	2292	OE1	GLU	468	24.312	55.744	55.699	0.51
	ATOM 2.79	2293	OE2	GLU	468	22.205	55.192	55.389	0.51
	ATOM 2.00	2294	C	GLU	468	22.274	57.412	60.486	0.51
20	ATOM 2.00	2295	O	GLU	468	21.133	57.557	60.870	0.51
	ATOM 2.68	2296	N	LEU	469	23.211	56.804	61.206	1.00
	ATOM 3.75	2298	CA	LEU	469	22.926	56.312	62.561	1.00
	ATOM 5.21	2299	CB	LEU	469	24.119	55.501	63.087	1.00
25	ATOM 4.76	2300	CG	LEU	469	23.928	54.801	64.441	1.00
	ATOM 6.81	2301	CD1	LEU	469	22.855	53.731	64.304	1.00
	ATOM 5.46	2302	CD2	LEU	469	25.248	54.097	64.824	1.00
	ATOM 3.44	2303	C	LEU	469	22.636	57.484	63.504	1.00
30	ATOM 5.45	2304	O	LEU	469	21.727	57.436	64.356	1.00
	ATOM 5.07	2305	N	TYR	470	23.416	58.563	63.369	1.00
	ATOM 4.26	2307	CA	TYR	470	23.161	59.732	64.240	1.00
	ATOM 4.94	2308	CB	TYR	470	24.186	60.877	63.983	1.00
35	ATOM 3.71	2309	CG	TYR	470	24.024	62.070	64.944	1.00
	ATOM 5.02	2310	CD1	TYR	470	24.180	61.905	66.310	1.00
	ATOM 5.96	2311	CE1	TYR	470	24.036	62.998	67.192	1.00
	ATOM 3.81	2312	CD2	TYR	470	23.716	63.357	64.454	1.00
40	ATOM 5.55	2313	CE2	TYR	470	23.588	64.425	65.296	1.00

	ATOM 6.06	2314	CZ	TYR	470	23.746	64.245	66.668	1.00
	ATOM 9.89	2315	OH	TYR	470	23.642	65.311	67.523	1.00
5	ATOM 4.76	2317	C	TYR	470	21.744	60.251	64.004	1.00
	ATOM 6.27	2318	O	TYR	470	21.031	60.618	64.942	1.00
10	ATOM 4.89	2319	N	GLN	471	21.310	60.291	62.739	1.00
	ATOM 4.63	2321	CA	GLN	471	19.956	60.783	62.482	1.00
	ATOM 4.81	2322	CB	GLN	471	19.774	61.108	61.000	1.00
15	ATOM 5.80	2323	CG	GLN	471	20.553	62.364	60.572	1.00
	ATOM 8.94	2324	CD	GLN	471	20.172	63.619	61.382	1.00
20	ATOM 6.43	2325	OE1	GLN	471	18.992	63.860	61.704	1.00
	ATOM 7.01	2326	NE2	GLN	471	21.189	64.395	61.770	1.00
	ATOM 5.92	2329	C	GLN	471	18.877	59.834	63.002	1.00
25	ATOM 5.03	2330	O	GLN	471	17.741	60.243	63.289	1.00
	ATOM 4.53	2331	N	LEU	472	19.203	58.537	63.023	1.00
30	ATOM 5.41	2333	CA	LEU	472	18.277	57.547	63.597	1.00
	ATOM 5.33	2334	CB	LEU	472	18.793	56.135	63.322	1.00
	ATOM 6.16	2335	CG	LEU	472	17.748	55.057	63.605	1.00
35	ATOM 8.74	2336	CD1	LEU	472	16.470	55.351	62.768	1.00
	ATOM 5.70	2337	CD2	LEU	472	18.332	53.678	63.277	1.00
40	ATOM 4.27	2338	C	LEU	472	18.160	57.793	65.129	1.00
	ATOM 6.39	2339	O	LEU	472	17.074	57.806	65.685	1.00
	ATOM 6.34	2340	N	MET	473	19.293	58.078	65.774	1.00
45	ATOM 6.70	2342	CA	MET	473	19.332	58.428	67.193	1.00
	ATOM 6.82	2343	CB	MET	473	20.756	58.809	67.612	1.00
50	ATOM 9.25	2344	CG	MET	473	21.759	57.673	67.661	1.00
	ATOM 6.04	2345	SD	MET	473	23.425	58.348	67.650	1.00
	ATOM 7.69	2346	CE	MET	473	24.397	56.872	67.411	1.00
55	ATOM 4.98	2347	C	MET	473	18.452	59.648	67.459	1.00
	ATOM 5.18	2348	O	MET	473	17.673	59.676	68.417	1.00

	ATOM 5.63	2349	N	ARG	474	18.588	60.666	66.603	1.00
	ATOM 6.92	2351	CA	ARG	474	17.775	61.881	66.772	1.00
5	ATOM 9.55	2352	CB	ARG	474	18.084	62.926	65.676	1.00
	ATOM 11.83	2353	CG	ARG	474	19.539	63.314	65.490	1.00
10	ATOM 18.94	2354	CD	ARG	474	20.051	64.228	66.556	1.00
	ATOM 20.37	2355	NE	ARG	474	19.308	65.498	66.637	1.00
	ATOM 17.59	2357	CZ	ARG	474	19.840	66.644	67.043	1.00
15	ATOM 12.90	2358	NH1	ARG	474	21.145	66.711	67.354	1.00
	ATOM 17.79	2361	NH2	ARG	474	19.018	67.646	67.381	1.00
20	ATOM 6.79	2364	C	ARG	474	16.280	61.538	66.722	1.00
	ATOM 5.98	2365	O	ARG	474	15.492	62.135	67.418	1.00
	ATOM 4.98	2366	N	LEU	475	15.888	60.572	65.882	1.00
25	ATOM 7.49	2368	CA	LEU	475	14.465	60.178	65.878	1.00
	ATOM 8.16	2369	CB	LEU	475	14.167	59.090	64.817	1.00
30	ATOM 8.88	2370	CG	LEU	475	14.426	59.426	63.359	1.00
	ATOM 10.43	2371	CD1	LEU	475	13.760	58.322	62.500	1.00
	ATOM 11.32	2372	CD2	LEU	475	13.781	60.775	63.021	1.00
35	ATOM 4.96	2373	C	LEU	475	14.089	59.644	67.241	1.00
	ATOM 6.19	2374	O	LEU	475	13.041	59.958	67.784	1.00
40	ATOM 5.35	2375	N	CYS	476	14.971	58.818	67.822	1.00
	ATOM 6.09	2377	CA	CYS	476	14.706	58.295	69.168	1.00
	ATOM 4.98	2378	CB	CYS	476	15.836	57.340	69.601	1.00
45	ATOM 7.06	2379	SG	CYS	476	15.937	55.886	68.514	1.00
	ATOM 5.88	2380	C	CYS	476	14.576	59.387	70.217	1.00
50	ATOM 4.37	2381	O	CYS	476	13.911	59.208	71.247	1.00
	ATOM 6.18	2382	N	TRP	477	15.169	60.555	69.925	1.00
	ATOM 7.04	2384	CA	TRP	477	15.140	61.635	70.878	1.00
55	ATOM 5.80	2385	CB	TRP	477	16.555	62.215	71.094	1.00
	ATOM 6.60	2386	CG	TRP	477	17.609	61.203	71.440	1.00

	ATOM 6.30	2387	CD2	TRP	477	18.978	61.225	71.020	1.00
	ATOM 5.65	2388	CE2	TRP	477	19.611	60.098	71.597	1.00
5	ATOM 4.69	2389	CE3	TRP	477	19.732	62.080	70.200	1.00
	ATOM 4.40	2390	CD1	TRP	477	17.470	60.096	72.238	1.00
10	ATOM 6.25	2391	NE1	TRP	477	18.673	59.442	72.341	1.00
	ATOM 7.14	2393	CZ2	TRP	477	20.972	59.816	71.411	1.00
	ATOM 6.66	2394	CZ3	TRP	477	21.096	61.802	70.012	1.00
15	ATOM 5.75	2395	CH2	TRP	477	21.690	60.666	70.613	1.00
	ATOM 8.41	2396	C	TRP	477	14.165	62.757	70.546	1.00
20	ATOM 7.82	2397	O	TRP	477	14.359	63.894	70.986	1.00
	ATOM 10.81	2398	N	LYS	478	13.120	62.452	69.775	1.00
	ATOM 11.81	2400	CA	LYS	478	12.105	63.471	69.495	1.00
25	ATOM 13.76	2401	CB	LYS	478	11.058	62.957	68.486	1.00
	ATOM 15.00	2402	CG	LYS	478	11.632	63.105	67.055	1.00
30	ATOM 20.43	2403	CD	LYS	478	10.682	62.928	65.943	1.00
	ATOM 19.86	2404	CE	LYS	478	11.383	63.220	64.623	1.00
	ATOM 24.89	2405	NZ	LYS	478	11.498	64.682	64.302	1.00
35	ATOM 10.75	2409	C	LYS	478	11.483	63.966	70.785	1.00
	ATOM 10.57	2410	O	LYS	478	11.411	63.245	71.774	1.00
40	ATOM 11.76	2411	N	GLU	479	11.136	65.245	70.830	1.00
	ATOM 13.93	2413	CA	GLU	479	10.545	65.821	72.044	1.00
	ATOM 16.32	2414	CB	GLU	479	10.230	67.310	71.834	1.00
45	ATOM 22.00	2415	CG	GLU	479	9.745	67.956	73.108	1.00
	ATOM 26.69	2416	CD	GLU	479	10.869	68.064	74.118	1.00
50	ATOM 28.93	2417	OE1	GLU	479	12.055	68.130	73.685	1.00
	ATOM 29.48	2418	OE2	GLU	479	10.589	68.082	75.338	1.00
	ATOM 12.78	2419	C	GLU	479	9.272	65.117	72.511	1.00
55	ATOM 11.58	2420	O	GLU	479	9.128	64.715	73.663	1.00
	ATOM 13.56	2421	N	ARG	480	8.306	65.011	71.606	1.00

5	ATOM 14.11	2423	CA	ARG	480	7.068	64.316	71.953	1.00
	ATOM 16.76	2424	CB	ARG	480	5.920	64.768	71.023	1.00
	ATOM 20.08	2425	CG	ARG	480	5.682	66.296	71.022	1.00
	ATOM 25.32	2426	CD	ARG	480	4.356	66.616	70.378	1.00
	ATOM 29.79	2427	NE	ARG	480	4.264	65.997	69.049	1.00
10	ATOM 30.49	2429	CZ	ARG	480	3.132	65.818	68.372	1.00
	ATOM 33.45	2430	NH1	ARG	480	1.981	66.214	68.906	1.00
	ATOM 29.91	2433	NH2	ARG	480	3.155	65.294	67.145	1.00
15	ATOM 11.61	2436	C	ARG	480	7.226	62.786	71.838	1.00
	ATOM 9.25	2437	O	ARG	480	7.665	62.280	70.813	1.00
	ATOM 11.62	2438	N	PRO	481	6.879	62.051	72.902	1.00
	ATOM 11.47	2439	CD	PRO	481	6.473	62.568	74.214	1.00
	ATOM 11.78	2440	CA	PRO	481	6.972	60.581	72.911	1.00
20	ATOM 11.23	2441	CB	PRO	481	6.221	60.207	74.172	1.00
	ATOM 14.23	2442	CG	PRO	481	6.615	61.347	75.110	1.00
	ATOM 12.23	2443	C	PRO	481	6.337	59.969	71.667	1.00
25	ATOM 11.31	2444	O	PRO	481	6.947	59.124	71.007	1.00
	ATOM 12.13	2445	N	GLU	482	5.175	60.488	71.269	1.00
	ATOM 12.86	2447	CA	GLU	482	4.447	59.979	70.091	1.00
	ATOM 15.98	2448	CB	GLU	482	3.013	60.577	70.013	1.00
	ATOM 20.93	2449	CG	GLU	482	2.982	62.087	70.078	1.00
30	ATOM 25.76	2450	CD	GLU	482	2.561	62.602	71.463	1.00
	ATOM 30.37	2451	OE1	GLU	482	1.399	63.103	71.539	1.00
	ATOM 19.57	2452	OE2	GLU	482	3.341	62.508	72.459	1.00
35	ATOM 13.01	2453	C	GLU	482	5.142	60.162	68.762	1.00
	ATOM 12.54	2454	O	GLU	482	4.803	59.494	67.785	1.00
	ATOM 13.69	2455	N	ASP	483	6.112	61.079	68.700	1.00
40	ATOM 11.91	2457	CA	ASP	483	6.858	61.286	67.463	1.00
	ATOM 12.80	2458	CB	ASP	483	7.359	62.742	67.336	1.00

	ATOM 16.80	2459	CG	ASP	483	6.242	63.738	67.122	1.00
	ATOM 14.10	2460	OD1	ASP	483	5.167	63.357	66.598	1.00
5	ATOM 18.37	2461	OD2	ASP	483	6.434	64.909	67.523	1.00
	ATOM 9.87	2462	C	ASP	483	8.040	60.333	67.313	1.00
10	ATOM 11.58	2463	O	ASP	483	8.668	60.268	66.246	1.00
	ATOM 8.94	2464	N	ARG	484	8.393	59.643	68.401	1.00
	ATOM 6.66	2466	CA	ARG	484	9.491	58.681	68.355	1.00
15	ATOM 7.83	2467	CB	ARG	484	9.964	58.350	69.776	1.00
	ATOM 7.05	2468	CG	ARG	484	10.257	59.553	70.614	1.00
20	ATOM 6.98	2469	CD	ARG	484	10.649	59.211	72.052	1.00
	ATOM 4.90	2470	NE	ARG	484	10.804	60.448	72.789	1.00
	ATOM 7.72	2472	CZ	ARG	484	10.601	60.560	74.100	1.00
25	ATOM 5.26	2473	NH1	ARG	484	10.308	59.488	74.824	1.00
	ATOM 7.38	2476	NH2	ARG	484	10.480	61.778	74.664	1.00
30	ATOM 8.43	2479	C	ARG	484	9.012	57.428	67.601	1.00
	ATOM 7.27	2480	O	ARG	484	7.859	57.041	67.691	1.00
	ATOM 7.08	2481	N	PRO	485	9.904	56.794	66.826	1.00
35	ATOM 5.37	2482	CD	PRO	485	11.361	57.012	66.755	1.00
	ATOM 8.48	2483	CA	PRO	485	9.486	55.624	66.074	1.00
40	ATOM 6.52	2484	CB	PRO	485	10.647	55.404	65.103	1.00
	ATOM 8.65	2485	CG	PRO	485	11.831	55.885	65.885	1.00
	ATOM 7.59	2486	C	PRO	485	9.252	54.418	66.954	1.00
45	ATOM 4.04	2487	O	PRO	485	9.514	54.440	68.161	1.00
	ATOM 6.13	2488	N	THR	486	8.685	53.379	66.341	1.00
50	ATOM 6.49	2490	CA	THR	486	8.509	52.125	67.031	1.00
	ATOM 7.20	2491	CB	THR	486	7.424	51.227	66.336	1.00
	ATOM 5.76	2492	OG1	THR	486	7.836	50.985	64.982	1.00
55	ATOM 9.07	2494	CG2	THR	486	6.033	51.934	66.341	1.00
	ATOM 6.99	2495	C	THR	486	9.796	51.346	66.939	1.00

5	ATOM 5.95	2496	O	THR	486	10.661	51.612	66.071	1.00
	ATOM 7.41	2497	N	PHE	487	9.895	50.303	67.768	1.00
	ATOM 7.05	2499	CA	PHE	487	11.051	49.435	67.728	1.00
	ATOM 5.13	2500	CB	PHE	487	11.099	48.583	69.028	1.00
10	ATOM 2.90	2501	CG	PHE	487	11.732	49.287	70.144	1.00
	ATOM 3.27	2502	CD1	PHE	487	13.112	49.564	70.101	1.00
	ATOM 2.00	2503	CD2	PHE	487	10.990	49.718	71.250	1.00
	ATOM 2.00	2504	CE1	PHE	487	13.721	50.242	71.155	1.00
15	ATOM 2.00	2505	CE2	PHE	487	11.570	50.374	72.264	1.00
	ATOM 2.70	2506	CZ	PHE	487	12.973	50.658	72.235	1.00
	ATOM 6.52	2507	C	PHE	487	11.039	48.600	66.477	1.00
	ATOM 5.26	2508	O	PHE	487	12.095	48.253	65.952	1.00
25	ATOM 6.84	2509	N	ASP	488	9.835	48.254	65.986	1.00
	ATOM 10.14	2511	CA	ASP	488	9.791	47.504	64.736	1.00
	ATOM 13.68	2512	CB	ASP	488	8.379	46.948	64.417	1.00
	ATOM 18.95	2513	CG	ASP	488	8.419	45.877	63.300	1.00
30	ATOM 21.79	2514	OD1	ASP	488	9.060	44.814	63.483	1.00
	ATOM 23.85	2515	OD2	ASP	488	7.859	46.115	62.225	1.00
	ATOM 8.80	2516	C	ASP	488	10.344	48.378	63.576	1.00
	ATOM 9.13	2517	O	ASP	488	11.000	47.882	62.677	1.00
40	ATOM 8.36	2518	N	TYR	489	10.065	49.681	63.611	1.00
	ATOM 7.68	2520	CA	TYR	489	10.648	50.587	62.606	1.00
	ATOM 7.51	2521	CB	TYR	489	10.053	52.001	62.730	1.00
	ATOM 9.26	2522	CG	TYR	489	10.712	53.012	61.813	1.00
50	ATOM 9.70	2523	CD1	TYR	489	10.269	53.190	60.505	1.00
	ATOM 10.43	2524	CE1	TYR	489	10.858	54.146	59.666	1.00
	ATOM 10.00	2525	CD2	TYR	489	11.778	53.801	62.255	1.00
	ATOM 11.07	2526	CE2	TYR	489	12.382	54.748	61.421	1.00
55	ATOM 11.40	2527	CZ	TYR	489	11.922	54.913	60.122	1.00



	ATOM 9.64	2528	OH	TYR	489	12.535	55.819	59.272	1.00
	ATOM 5.72	2530	C	TYR	489	12.188	50.652	62.763	1.00
5	ATOM 7.93	2531	O	TYR	489	12.926	50.492	61.825	1.00
	ATOM 5.65	2532	N	LEU	490	12.675	50.858	63.992	1.00
10	ATOM 4.64	2534	CA	LEU	490	14.116	50.877	64.228	1.00
	ATOM 5.14	2535	CB	LEU	490	14.377	51.126	65.726	1.00
	ATOM 3.68	2536	CG	LEU	490	13.994	52.554	66.205	1.00
15	ATOM 6.17	2537	CD1	LEU	490	13.894	52.619	67.761	1.00
	ATOM 5.67	2538	CD2	LEU	490	15.121	53.481	65.721	1.00
20	ATOM 6.45	2539	C	LEU	490	14.795	49.575	63.763	1.00
	ATOM 4.40	2540	O	LEU	490	15.853	49.569	63.139	1.00
	ATOM 6.90	2541	N	ARG	491	14.150	48.438	64.049	1.00
25	ATOM 6.24	2543	CA	ARG	491	14.713	47.172	63.614	1.00
	ATOM 7.39	2544	CB	ARG	491	13.807	46.024	64.085	1.00
30	ATOM 13.33	2545	CG	ARG	491	14.249	44.589	63.595	1.00
	ATOM 16.63	2546	CD	ARG	491	13.006	43.783	63.232	1.00
	ATOM 23.18	2547	NE	ARG	491	12.852	43.719	61.777	1.00
35	ATOM 22.69	2549	CZ	ARG	491	11.840	44.176	61.047	1.00
	ATOM 23.32	2550	NH1	ARG	491	10.783	44.798	61.560	1.00
40	ATOM 26.41	2553	NH2	ARG	491	11.857	43.907	59.766	1.00
	ATOM 6.15	2556	C	ARG	491	14.845	47.138	62.078	1.00
	ATOM 8.27	2557	O	ARG	491	15.887	46.767	61.512	1.00
45	ATOM 5.72	2558	N	SER	492	13.781	47.533	61.401	0.71
	ATOM 5.48	2560	CA	SER	492	13.771	47.514	59.941	0.71
50	ATOM 7.19	2561	CB	SER	492	12.379	47.952	59.447	0.71
	ATOM 11.62	2562	OG	SER	492	12.296	47.757	58.055	0.71
	ATOM 4.57	2564	C	SER	492	14.867	48.388	59.320	0.71
55	ATOM 2.00	2565	O	SER	492	15.580	47.991	58.402	0.71
	ATOM 5.21	2566	N	VAL	493	14.996	49.609	59.845	1.00

	ATOM 4.52	2568	CA	VAL	493	16.013	50.529	59.366	1.00
	ATOM 5.78	2569	CB	VAL	493	15.809	51.921	60.073	1.00
5	ATOM 5.45	2570	CG1	VAL	493	16.988	52.876	59.825	1.00
	ATOM 7.49	2571	CG2	VAL	493	14.535	52.548	59.627	1.00
10	ATOM 3.86	2572	C	VAL	493	17.436	50.006	59.632	1.00
	ATOM 5.74	2573	O	VAL	493	18.299	50.059	58.791	1.00
	ATOM 4.14	2574	N	LEU	494	17.693	49.544	60.857	1.00
15	ATOM 6.78	2576	CA	LEU	494	19.040	49.061	61.174	1.00
	ATOM 4.46	2577	CB	LEU	494	19.186	48.810	62.671	1.00
20	ATOM 4.63	2578	CG	LEU	494	19.141	50.121	63.485	1.00
	ATOM 4.58	2579	CD1	LEU	494	18.661	49.807	64.958	1.00
	ATOM 2.17	2580	CD2	LEU	494	20.541	50.809	63.475	1.00
25	ATOM 7.37	2581	C	LEU	494	19.484	47.834	60.330	1.00
	ATOM 6.93	2582	O	LEU	494	20.684	47.665	60.050	1.00
30	ATOM 7.28	2583	N	GLU	495	18.503	47.015	59.941	1.00
	ATOM 10.08	2585	CA	GLU	495	18.770	45.865	59.055	1.00
	ATOM 9.68	2586	CB	GLU	495	17.552	44.917	59.002	1.00
35	ATOM 12.01	2587	CG	GLU	495	17.314	44.174	60.318	1.00
	ATOM 18.21	2588	CD	GLU	495	16.180	43.152	60.257	1.00
40	ATOM 17.97	2589	OE1	GLU	495	15.568	42.977	59.163	1.00
	ATOM 19.73	2590	OE2	GLU	495	15.881	42.524	61.313	1.00
	ATOM 7.94	2591	C	GLU	495	19.154	46.382	57.647	1.00
45	ATOM 8.27	2592	O	GLU	495	20.078	45.902	57.002	1.00
	ATOM 9.27	2593	N	ASP	496	18.494	47.446	57.222	1.00
50	ATOM 9.40	2595	CA	ASP	496	18.840	48.047	55.932	1.00
	ATOM 9.76	2596	CB	ASP	496	17.801	49.109	55.543	1.00
	ATOM 9.08	2597	CG	ASP	496	16.529	48.508	55.005	1.00
55	ATOM 13.10	2598	OD1	ASP	496	16.546	47.317	54.624	1.00
	ATOM 8.40	2599	OD2	ASP	496	15.506	49.203	54.934	1.00

	ATOM 9.38	2600	C	ASP	496	20.231	48.655	56.023	1.00
	ATOM 9.97	2601	O	ASP	496	21.073	48.442	55.132	1.00
5	ATOM 9.58	2602	N	PHE	497	20.533	49.304	57.151	1.00
	ATOM 10.82	2604	CA	PHE	497	21.848	49.897	57.349	1.00
10	ATOM 10.33	2605	CB	PHE	497	21.947	50.567	58.730	1.00
	ATOM 8.98	2606	CG	PHE	497	21.261	51.910	58.846	1.00
	ATOM 9.24	2607	CD1	PHE	497	20.500	52.438	57.804	1.00
15	ATOM 8.40	2608	CD2	PHE	497	21.440	52.673	59.987	1.00
	ATOM 9.15	2609	CE1	PHE	497	19.829	53.667	57.950	1.00
20	ATOM 9.96	2610	CE2	PHE	497	20.777	53.910	60.153	1.00
	ATOM 8.87	2611	CZ	PHE	497	20.007	54.428	59.111	1.00
	ATOM 12.89	2612	C	PHE	497	22.950	48.816	57.273	1.00
25	ATOM 11.96	2613	O	PHE	497	23.970	48.965	56.612	1.00
	ATOM 14.97	2614	N	PHE	498	22.697	47.728	57.996	1.00
30	ATOM 20.02	2616	CA	PHE	498	23.598	46.574	58.066	1.00
	ATOM 20.25	2617	CB	PHE	498	23.036	45.591	59.157	1.00
	ATOM 22.23	2618	CG	PHE	498	23.576	44.196	59.110	1.00
35	ATOM 22.93	2619	CD1	PHE	498	24.928	43.940	59.094	1.00
	ATOM 26.01	2620	CD2	PHE	498	22.695	43.118	59.149	1.00
40	ATOM 24.58	2621	CE1	PHE	498	25.397	42.624	59.110	1.00
	ATOM 24.88	2622	CE2	PHE	498	23.147	41.813	59.165	1.00
	ATOM 24.56	2623	CZ	PHE	498	24.497	41.560	59.147	1.00
45	ATOM 21.85	2624	C	PHE	498	23.762	45.903	56.700	1.00
	ATOM 22.72	2625	O	PHE	498	24.864	45.729	56.220	1.00
50	ATOM 24.16	2626	N	THR	499	22.649	45.632	56.036	1.00
	ATOM 28.58	2628	CA	THR	499	22.697	44.965	54.747	1.00
	ATOM 27.62	2629	CB	THR	499	21.426	44.126	54.498	1.00
55	ATOM 29.10	2630	OG1	THR	499	20.310	44.997	54.393	1.00
	ATOM 29.27	2632	CG2	THR	499	21.167	43.190	55.659	1.00

	ATOM	2633	C	THR	499	22.932	45.913	53.594	1.00
	32.13								
	ATOM	2634	O	THR	499	22.396	45.726	52.492	1.00
	33.33								
5	ATOM	2635	N	ALA	500	23.726	46.937	53.900	1.00
	33.44								
	ATOM	2637	CA	ALA	500	24.182	48.016	53.028	1.00
	35.24								
10	ATOM	2638	CB	ALA	500	23.417	49.327	53.341	1.00
	34.45								
	ATOM	2639	C	ALA	500	25.672	48.223	53.293	1.00
	36.18								
	ATOM	2640	O	ALA	500	26.454	48.448	52.368	1.00
	37.53								
15	ATOM	2641	N	THR	501	26.062	48.167	54.575	1.00
	35.49								
	ATOM	2643	CA	THR	501	27.477	48.285	54.968	1.00
	35.21								
20	ATOM	2644	CB	THR	501	27.660	48.803	56.434	1.00
	34.98								
	ATOM	2645	OG1	THR	501	27.065	47.864	57.335	1.00
	34.15								
	ATOM	2647	CG2	THR	501	27.027	50.190	56.633	1.00
	33.83								
25	ATOM	2648	C	THR	501	28.184	46.918	54.862	1.00
	36.81								
	ATOM	2649	O	THR	501	27.963	46.234	53.833	1.00
	36.26								
30	ATOM	2650	OT	THR	501	28.927	46.526	55.809	1.00
	37.49								
	ATOM	2651	OH2	TIP	1	19.311	61.451	77.517	1.00
	9.51								
	ATOM	2654	OH2	TIP	2	21.927	30.146	74.495	1.00
	10.87								
35	ATOM	2657	OH2	TIP	3	16.683	33.287	74.355	1.00
	9.01								
	ATOM	2660	OH2	TIP	4	39.739	38.338	73.029	1.00
	16.54								
40	ATOM	2663	OH2	TIP	5	14.739	52.071	79.171	1.00
	10.02								
	ATOM	2666	OH2	TIP	6	20.566	63.204	73.067	1.00
	10.44								
	ATOM	2669	OH2	TIP	7	26.999	32.025	74.946	1.00
	11.15								
45	ATOM	2672	OH2	TIP	8	24.523	79.325	73.707	1.00
	12.34								
	ATOM	2675	OH2	TIP	9	26.415	24.060	78.113	1.00
	11.63								
50	ATOM	2678	OH2	TIP	10	25.241	50.846	79.942	1.00
	4.37								
	ATOM	2681	OH2	TIP	11	23.356	20.960	77.886	1.00
	10.04								
	ATOM	2684	OH2	TIP	12	26.225	73.383	70.539	1.00
	11.22								
55	ATOM	2687	OH2	TIP	13	13.101	71.939	72.454	1.00
	15.78								
	ATOM	2690	OH2	TIP	14	28.040	56.696	74.337	1.00
	10.46								

5	ATOM 11.77	2693	OH2 TIP	15	13.599	34.317	76.278	1.00
	ATOM 12.52	2696	OH2 TIP	16	14.407	25.394	81.101	1.00
	ATOM 11.75	2699	OH2 TIP	17	22.531	19.149	81.866	1.00
	ATOM 12.20	2702	OH2 TIP	18	3.993	51.722	76.108	1.00
	ATOM 16.97	2705	OH2 TIP	19	33.188	40.683	77.485	1.00
10	ATOM 11.69	2708	OH2 TIP	20	30.131	18.456	80.658	1.00
	ATOM 10.89	2711	OH2 TIP	21	28.146	53.808	78.726	1.00
	ATOM 25.51	2714	OH2 TIP	22	5.966	57.823	65.467	1.00
15	ATOM 11.19	2717	OH2 TIP	23	4.770	47.784	75.121	1.00
	ATOM 12.30	2720	OH2 TIP	24	29.430	62.780	71.874	1.00
	ATOM 15.79	2723	OH2 TIP	25	23.569	29.609	76.723	1.00
	ATOM 11.30	2726	OH2 TIP	26	19.387	28.532	78.780	1.00
20	ATOM 12.69	2729	OH2 TIP	27	30.446	41.985	81.415	1.00
	ATOM 12.12	2732	OH2 TIP	28	26.750	65.828	74.084	1.00
	ATOM 12.02	2735	OH2 TIP	29	16.554	62.515	62.377	1.00
25	ATOM 11.65	2738	OH2 TIP	30	4.250	54.927	67.119	1.00
	ATOM 11.53	2741	OH2 TIP	31	11.960	33.677	79.416	1.00
	ATOM 12.18	2744	OH2 TIP	32	17.879	62.427	79.648	1.00
30	ATOM 11.64	2747	OH2 TIP	33	25.759	21.951	76.518	1.00
	ATOM 8.69	2750	OH2 TIP	34	4.279	16.551	94.709	1.00
	ATOM 17.41	2753	OH2 TIP	35	43.046	45.255	71.148	1.00
	ATOM 12.80	2756	OH2 TIP	36	33.552	42.873	62.416	1.00
35	ATOM 12.19	2759	OH2 TIP	37	24.371	69.370	70.424	1.00
	ATOM 10.23	2762	OH2 TIP	38	8.595	65.929	68.815	1.00
	ATOM 13.16	2765	OH2 TIP	39	16.431	52.748	84.453	1.00
40	ATOM 16.76	2768	OH2 TIP	40	26.298	70.962	71.663	1.00
	ATOM 18.95	2771	OH2 TIP	41	40.273	44.193	77.523	1.00
	ATOM 15.53	2774	OH2 TIP	42	11.838	33.972	69.173	1.00
45	ATOM 29.10	2777	OH2 TIP	43	1.764	39.205	79.803	1.00

5	ATOM	2780	OH2 TIP	44	13.713	56.017	79.376	1.00
	14.52							
	ATOM	2783	OH2 TIP	45	6.708	45.582	67.704	1.00
10	11.88							
	ATOM	2786	OH2 TIP	46	17.978	38.720	82.589	1.00
	19.42							
15	ATOM	2789	OH2 TIP	47	20.013	71.383	84.993	1.00
	19.83							
	ATOM	2792	OH2 TIP	48	23.308	59.317	84.264	1.00
20	13.60							
	ATOM	2795	OH2 TIP	49	17.831	34.267	99.574	1.00
	23.35							
25	ATOM	2798	OH2 TIP	50	15.163	19.433	87.833	1.00
	14.39							
	ATOM	2801	OH2 TIP	51	36.528	39.376	74.325	1.00
30	20.47							
	ATOM	2804	OH2 TIP	52	30.957	70.019	72.459	1.00
	31.69							
35	ATOM	2807	OH2 TIP	53	22.787	58.814	87.531	1.00
	33.78							
	ATOM	2810	OH2 TIP	54	3.052	57.417	68.084	1.00
40	19.58							
	ATOM	2813	OH2 TIP	55	13.253	23.640	94.461	1.00
	19.36							
45	ATOM	2816	OH2 TIP	56	35.613	44.620	79.222	1.00
	27.49							
	ATOM	2819	OH2 TIP	57	26.527	64.552	87.243	1.00
50	23.67							
	ATOM	2822	OH2 TIP	58	28.903	71.148	70.501	1.00
	17.76							
55	ATOM	2825	OH2 TIP	59	29.760	58.827	74.516	1.00
	15.12							
	ATOM	2828	OH2 TIP	60	43.367	40.547	77.280	1.00
60	18.72							
	ATOM	2831	OH2 TIP	61	15.982	75.980	77.993	1.00
	24.23							
65	ATOM	2834	OH2 TIP	62	32.897	34.167	71.680	1.00
	27.51							
	ATOM	2837	OH2 TIP	63	6.623	58.163	77.247	1.00
70	19.01							
	ATOM	2840	OH2 TIP	64	30.113	60.394	72.292	1.00
	15.41							
75	ATOM	2843	OH2 TIP	65	3.586	40.599	83.831	1.00
	30.72							
	ATOM	2846	OH2 TIP	66	27.441	51.105	81.647	1.00
80	19.30							
	ATOM	2849	OH2 TIP	67	24.529	67.677	74.244	1.00
	16.22							
85	ATOM	2852	OH2 TIP	68	19.038	52.615	83.053	1.00
	24.52							
	ATOM	2855	OH2 TIP	69	25.114	31.789	71.057	1.00
90	23.79							
	ATOM	2858	OH2 TIP	70	9.969	59.436	64.059	1.00
	17.72							
95	ATOM	2861	OH2 TIP	71	29.504	66.330	74.969	1.00
	18.42							
	ATOM	2864	OH2 TIP	72	6.497	52.369	69.874	1.00
	12.22							

5	ATOM 34.15	2867	OH2 TIP	73	14.390	22.955	83.276	1.00
	ATOM 19.72	2870	OH2 TIP	74	27.616	25.173	94.161	1.00
	ATOM 16.84	2873	OH2 TIP	75	-1.474	21.109	94.026	1.00
	ATOM 29.78	2876	OH2 TIP	76	7.073	27.726	99.566	1.00
10	ATOM 14.43	2879	OH2 TIP	77	3.184	17.629	92.263	1.00
	ATOM 18.23	2882	OH2 TIP	78	10.524	41.239	67.027	1.00
	ATOM 19.87	2885	OH2 TIP	79	13.981	69.635	73.583	1.00
	ATOM 19.18	2888	OH2 TIP	80	15.009	39.727	90.769	1.00
15	ATOM 13.29	2891	OH2 TIP	81	17.180	29.359	79.794	1.00
	ATOM 30.33	2894	OH2 TIP	82	8.570	33.844	71.005	1.00
	ATOM 21.60	2897	OH2 TIP	83	27.624	20.321	77.495	1.00
	ATOM 22.43	2900	OH2 TIP	84	14.470	25.077	74.515	1.00
20	ATOM 33.81	2903	OH2 TIP	85	15.658	69.961	86.496	1.00
	ATOM 18.89	2906	OH2 TIP	86	4.347	43.749	85.189	1.00
	ATOM 19.63	2909	OH2 TIP	87	13.646	22.495	79.270	1.00
	ATOM 22.73	2912	OH2 TIP	88	34.351	49.689	60.577	1.00
25	ATOM 23.49	2915	OH2 TIP	89	4.570	27.575	95.849	1.00
	ATOM 33.95	2918	OH2 TIP	90	14.488	65.973	82.024	1.00
	ATOM 9.67	2921	OH2 TIP	91	14.199	45.984	83.667	1.00
	ATOM 28.99	2924	OH2 TIP	92	12.650	36.289	79.191	1.00
30	ATOM 14.74	2927	OH2 TIP	93	7.704	54.375	63.754	1.00
	ATOM 13.30	2930	OH2 TIP	94	41.632	44.586	69.191	1.00
	ATOM 11.35	2933	OH2 TIP	95	22.332	28.550	79.220	1.00
	ATOM 40.43	2936	OH2 TIP	96	3.508	56.701	74.135	1.00
35	ATOM 14.29	2939	OH2 TIP	97	13.230	31.893	74.970	1.00
	ATOM 36.97	2942	OH2 TIP	98	30.226	70.647	76.992	1.00
	ATOM 30.61	2945	OH2 TIP	99	30.660	29.412	77.031	1.00
	ATOM 35.05	2948	OH2 TIP	100	3.867	29.346	100.830	1.00
40	ATOM 42.40	2951	OH2 TIP	101	3.305	31.423	85.206	1.00

5	ATOM 34.70	2954	OH2 TIP	102	19.769	33.131	97.641	1.00
	ATOM 26.31	2957	OH2 TIP	103	32.525	60.209	71.096	1.00
	ATOM 39.40	2960	OH2 TIP	104	14.385	18.965	81.633	1.00
10	ATOM 47.36	2963	OH2 TIP	105	35.303	37.590	69.165	1.00
	ATOM 27.18	2966	OH2 TIP	106	12.150	44.315	98.941	1.00
	ATOM 34.79	2969	OH2 TIP	107	31.404	65.727	72.463	1.00
15	ATOM 48.77	2972	OH2 TIP	108	1.407	57.920	64.929	1.00
	ATOM 23.64	2975	OH2 TIP	109	9.310	40.098	102.788	1.00
	ATOM 38.03	2978	OH2 TIP	110	-0.848	51.009	82.212	1.00
20	ATOM 39.17	2981	OH2 TIP	111	13.086	42.678	102.403	1.00
	ATOM 27.63	2984	OH2 TIP	112	1.621	52.914	87.041	1.00
	ATOM 46.48	2987	OH2 TIP	113	10.616	25.358	97.769	1.00
25	ATOM 54.81	2990	OH2 TIP	114	2.753	32.296	80.523	1.00
	ATOM 22.62	2993	OH2 TIP	115	19.151	70.156	86.599	1.00
	ATOM 44.00	2996	OH2 TIP	116	3.297	33.113	89.038	1.00
30	ATOM 30.07	2999	OH2 TIP	117	12.148	21.276	94.594	1.00
	ATOM 25.91	3002	OH2 TIP	118	9.743	70.112	82.946	1.00
	ATOM 37.83	3005	OH2 TIP	119	43.117	37.524	68.875	1.00
35	ATOM 27.17	3008	OH2 TIP	120	22.806	32.177	72.420	1.00
	ATOM 45.70	3011	OH2 TIP	121	12.282	70.067	76.126	1.00
	ATOM 33.61	3014	OH2 TIP	122	-0.783	32.259	88.769	1.00
40	ATOM 32.87	3017	OH2 TIP	123	32.388	39.732	89.901	1.00
	ATOM 31.46	3020	OH2 TIP	124	7.556	27.635	91.724	1.00
	ATOM 41.06	3023	OH2 TIP	125	4.664	63.106	77.282	1.00
45	ATOM 49.77	3026	OH2 TIP	126	7.065	70.330	72.529	1.00
	ATOM 48.00	3029	OH2 TIP	127	10.158	28.414	102.841	1.00
	ATOM 19.66	3032	OH2 TIP	128	17.158	52.424	87.288	1.00
50	ATOM 44.45	3035	OH2 TIP	129	30.654	73.854	75.647	1.00
	ATOM 19.36	3038	OH2 TIP	130	8.181	21.129	91.405	1.00



	ATOM 44.63	3041	OH2	TIP	131	30.265	26.627	76.393	1.00
	ATOM 37.69	3044	OH2	TIP	132	1.404	36.670	96.617	1.00
5	ATOM 36.32	3047	OH2	TIP	133	27.398	58.917	84.327	1.00
	ATOM 23.63	3050	OH2	TIP	134	26.579	75.000	74.442	1.00
10	ATOM 51.76	3053	OH2	TIP	135	4.864	37.496	69.248	1.00
	ATOM 46.94	3056	OH2	TIP	136	38.759	60.728	66.988	1.00
	ATOM 31.69	3059	OH2	TIP	137	7.041	27.787	102.352	1.00
15	ATOM 54.98	3062	OH2	TIP	138	1.044	56.406	73.837	1.00
	ATOM 43.88	3065	OH2	TIP	139	0.020	59.351	68.080	1.00
20	ATOM 25.03	3068	OH2	TIP	140	24.025	74.725	76.829	1.00
	ATOM 40.36	3071	OH2	TIP	141	24.528	53.450	56.345	1.00
	ATOM 43.71	3074	OH2	TIP	142	32.470	40.634	63.102	1.00
25	ATOM 42.17	3077	OH2	TIP	143	35.837	41.876	83.267	1.00
	ATOM 21.66	3080	OH2	TIP	144	13.772	74.524	73.842	1.00
30	ATOM 29.61	3083	OH2	TIP	145	11.507	59.640	87.674	1.00
	ATOM 55.37	3086	OH2	TIP	146	35.527	33.428	69.247	1.00
	ATOM 20.28	3089	OH2	TIP	147	-1.325	20.750	100.326	1.00
35	ATOM 42.05	3092	OH2	TIP	148	8.007	41.733	67.424	1.00
	ATOM 54.86	3095	OH2	TIP	149	-1.487	56.737	73.798	1.00
40	ATOM 37.34	3098	OH2	TIP	150	6.452	37.420	92.986	1.00
	ATOM 34.95	3101	OH2	TIP	151	3.247	49.993	70.994	1.00
	ATOM 10.65	3104	S	SO4	901	20.457	33.124	69.153	1.00
45	ATOM 11.07	3105	O1	SO4	901	20.257	32.482	70.403	1.00
	ATOM 10.55	3106	O2	SO4	901	19.170	33.561	68.666	1.00
50	ATOM 11.81	3107	O3	SO4	901	21.309	34.278	69.356	1.00
	ATOM 8.82	3108	O4	SO4	901	21.109	32.174	68.216	1.00
	ATOM 11.24	3109	O4	STU	1	26.535	40.495	85.876	1.00
55	ATOM 9.72	3110	C25	STU	1	27.502	40.339	84.840	1.00
	ATOM 10.96	3111	C24	STU	1	27.822	41.685	84.136	1.00

	ATOM 12.11	3112	C23	STU	1	26.945	42.806	84.728	1.00
	ATOM 12.20	3113	C22	STU	1	25.446	42.387	84.626	1.00
5	ATOM 11.74	3114	C21	STU	1	25.305	41.210	85.651	1.00
	ATOM 10.18	3115	C26	STU	1	24.993	41.810	86.999	1.00
10	ATOM 8.64	3116	N2	STU	1	24.278	40.197	85.248	1.00
	ATOM 7.31	3117	C18	STU	1	24.601	39.145	84.402	1.00
	ATOM 8.67	3118	C19	STU	1	25.764	38.773	83.853	1.00
15	ATOM 6.68	3119	C6	STU	1	25.858	37.605	82.996	1.00
	ATOM 5.78	3120	C7	STU	1	24.603	36.902	82.801	1.00
20	ATOM 5.78	3121	C10	STU	1	23.475	37.277	83.341	1.00
	ATOM 7.21	3122	C11	STU	1	23.380	38.427	84.169	1.00
	ATOM 8.03	3123	C12	STU	1	22.339	39.076	84.853	1.00
25	ATOM 7.47	3124	C17	STU	1	22.898	40.224	85.534	1.00
	ATOM 10.26	3125	C16	STU	1	22.083	41.046	86.257	1.00
30	ATOM 7.20	3126	C15	STU	1	20.716	40.769	86.371	1.00
	ATOM 8.16	3127	C14	STU	1	20.171	39.651	85.714	1.00
	ATOM 7.93	3128	C13	STU	1	20.985	38.816	84.968	1.00
35	ATOM 6.61	3129	C9	STU	1	22.330	36.321	82.954	1.00
	ATOM 7.37	3130	N1	STU	1	23.082	35.431	82.089	1.00
40	ATOM 6.69	3131	C8	STU	1	24.394	35.657	81.967	1.00
	ATOM 9.35	3132	O5	STU	1	25.212	35.024	81.341	1.00
	ATOM 8.25	3133	C5	STU	1	27.220	37.488	82.579	1.00
45	ATOM 8.48	3134	C20	STU	1	27.911	38.565	83.172	1.00
	ATOM 10.31	3135	C1	STU	1	29.291	38.755	82.956	1.00
50	ATOM 7.16	3136	C2	STU	1	29.958	37.837	82.165	1.00
	ATOM 6.36	3137	C3	STU	1	29.269	36.771	81.567	1.00
	ATOM 6.70	3138	C4	STU	1	27.892	36.595	81.781	1.00
55	ATOM 11.36	3139	N3	STU	1	27.065	39.299	83.909	1.00
	ATOM 15.68	3140	O6	STU	1	25.269	41.898	83.285	1.00

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	ATOM	3141	C27	STU	1	24.060	42.366	82.717	1.00
	16.90								
	ATOM	3142	N4	STU	1	27.204	44.135	83.925	1.00
	14.54								
5	ATOM	3143	C28	STU	1	28.684	44.317	83.715	1.00
	18.14								
	END								

10

Table 5

Table of the statistics of diffraction data and refined complex structures

		Reso	Rsym (*)	Complete	unique	observed	Rref	Rfree
5								
	AMP-PNP1	1.6O	5.9 (14.5%)	98 (96%)	38,529	258,235	20.0%	
	23.0%							
	AMP-PNP2	2.2O	4.2 (11.6%)	96 (95%)	15,024	54,174	23.7%	
10	27.0%							
	Staurosporine	2.0O	5.9 (12.1%)	99 (100%)	20,010	161,934	19.5%	
	23.7%							
15	PP2	2.0O	8.2 (19.8%)	93 (90%)	19,946	53,618	18.9%	
	25.4%							

20 Note: Rsyms in the parentheses are for the highest resolution shell. Fobs greater than  $1\sigma$  are used in the structural refinement. In all the structures residues 231 to 501 of Lck are included in the final refined model with water molecules added. The N- and C- terminal segments (GS-225-230 and 502-509) are however disordered (GS are the two extra residues left from the thrombin cleavage). The RMS bond length and angles

25 for the AMP-PNP/Lck complex, staurosporine and PP2 are 0.018O /2.1°, 0.019O/2.0°, 0.018O/1.8°, respectively. AMP-PNP1 and AMP-PNP2 diffraction data correspond to Table 2 and Table 3 respectively.

30

CLAIMS

What is claimed is:

- 5           1.     A crystal of a protein-ligand complex comprising a protein-ligand complex of a truncated lck and a ligand, wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms; and wherein the truncated lck: (a) comprises amino acids 225 to 508 of SEQ ID NO: 1 or an amino acid sequence that  
10       differs from amino acids 225 to 508 of SEQ ID NO: 1 by only conservative substitutions; and (b) retains the globular core of the corresponding full-length lck.
2.     The crystal of claim 1, wherein the truncated lck comprises an amino acid sequence of amino acids 251 to 371 of SEQ ID NO: 1, or an amino acid sequence  
15       that differs from amino acids 251 to 371 of SEQ ID NO: 1 by only conservative substitutions.
3.     The crystal of claim 1 or 2, wherein the ligand is AMP-PNP.
- 20          4.     The crystal of claim 1 or 2, wherein the ligand is staurosporine.
5.     The crystal of claim 1 or 2, wherein the ligand is PP2.
6.     The crystal of claim 3 having space group of  $P2_12_12_1$  and a unit cell of  
25       dimensions of  $a = 42.1 \text{ \AA}$ ,  $b = 73.7 \text{ \AA}$ , and  $c = 91.7 \text{ \AA}$ .
7.     The crystal of claim 4 having space group of  $P2_12_12_1$  and a unit cell of dimensions of  $a = 42.2 \text{ \AA}$ ,  $b = 73.8 \text{ \AA}$ , and  $c = 91.4 \text{ \AA}$ .
- 30          8.     The crystal of claim 4 having space group of  $P2_12_12_1$  and a unit cell of dimensions of  $a = 61.5 \text{ \AA}$ ,  $b = 69.0 \text{ \AA}$ , and  $c = 73.7 \text{ \AA}$ .

9. The crystal of claim 5 having space group of  $P2_12_12_1$  and a unit cell of dimensions of  $a = 42.0 \text{ \AA}$ ,  $b = 73.7 \text{ \AA}$ , and  $c = 91.6 \text{ \AA}$ .

10. The crystal of claim 1 wherein the kinase has secondary structural elements that include five beta strands and one helix in the N-terminal lobe (strands 1, 2, 3, 4 and 5 and alpha helix C), and two beta strands and seven alpha helices in the C-terminal domain (strands 6 & 8, and alpha helices D, E, EF, F, G, H and I).

11. A method of using the crystal of claim 1 in a inhibitor screening assay comprising:

- (a) selecting a potential inhibitor by performing rational drug design with the three-dimensional structure determined for the crystal, wherein said selecting is performed in conjunction with computer modeling;
- (b) contacting the potential inhibitor with a kinase; and
- (c) detecting the ability of the potential inhibitor for inhibiting the kinase.

12. The method of claim 11, wherein detecting the ability of the potential inhibitor for inhibiting the kinase in step (c) is performed using an enzyme inhibition assay.

13. The method of claim 11, wherein detecting the ability of the potential inhibitor for inhibiting the kinase in step (c) is performed using a cellular-based assay.

14. The method of claim 11 further comprising:

- (d) growing a supplemental crystal comprising a protein-ligand complex formed between the kinase and a first potential inhibitor from step (a), wherein the supplemental crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms;
- (e) determining the three-dimensional structure of the supplemental crystal;

- (f) selecting a second potential inhibitor by performing rational drug design with the three-dimensional structure determined for the supplemental crystal, wherein said selecting is performed in conjunction with computer modeling;
- 5 (g) contacting the second potential inhibitor with a kinase; and
- (h) detecting the ability of the second potential inhibitor for inhibiting the kinase.

15. A method for identifying a potential inhibitor of a kinase comprising:
- 10 (a) selecting or designing a potential inhibitor by performing rational drug design with the three-dimensional structure coordinates of any of Tables 1-4, wherein said selecting is performed in conjunction with computer modeling;
  - (b) contacting the potential inhibitor with a kinase; and
  - 15 (c) detecting the ability of the potential inhibitor for inhibiting the kinase.

16. The method of claim 15, wherein detecting the ability of the potential inhibitor for inhibiting the kinase in step (c) is performed using an enzyme inhibition assay.

- 20 17. The method of claim 15, wherein detecting the ability of the potential inhibitor for inhibiting the kinase in step (c) is performed using a cellular-based assay.

- 25 18. The method of claim 15, wherein the potential inhibitor is designed *de novo*.

19. The method of claim 15, wherein the potential inhibitor is designed from a known inhibitor.

- 30 20. The method of claim 15 further comprising:

- (d) selecting an second potential inhibitor by performing rational drug design with the three-dimensional structure coordinates of any of Tables 1-4 and the potential inhibitor of step (a), wherein said selecting is performed in conjunction with computer modeling;
- 5 (e) contacting the potential inhibitor with a kinase; and
- (f) detecting the ability of the potential inhibitor for inhibiting the kinase.

21. A method of using truncated lck to grow a crystal of a protein-ligand complex comprising:

- 10 (c) contacting truncated lck with a ligand, wherein the truncated lck forms a protein-ligand complex with the ligand; and
- (d) growing the crystal of the protein-ligand complex; wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0
- 15 Angstroms.

22. The method of claim 21, wherein said growing is performed by hanging drop vapor diffusion.

20 23. The method of claim 21, wherein said ligand is PP2, staurosporine or AMP-PNP.

24. The method of claim 21, wherein said ligand is PP2.

25 25. A method of growing a crystal of a truncated lck-ligand complex wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms, comprising:

- 30 (a) contacting a truncated lck solution with a ligand, wherein the truncated lck forms a protein-ligand complex with the ligand; and
- (b) growing the crystal of the protein-ligand complex; wherein the crystal effectively diffracts X-rays for the determination of the atomic



coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms.

26. The method of claim 25, wherein the growing is performed by hanging  
5 drop vapor diffusion.

27. The method of claim 25, wherein the ligand is PP2, staurosporine or AMP-PNP.

10 28. A method of producing a crystal of a truncated lck-ligand complex wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms, comprising contacting a truncated lck crystal with a ligand, wherein the truncated lck forms a protein-ligand complex with the ligand within the crystal, and  
15 wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms.

29. The method of claim 28, wherein the ligand is PP2, staurosporine or  
20 AMP-PNP.

30. A method of using the three-dimensional structure coordinates of any one of Tables 1-4, comprising:

- 25 (a) Determining structure factors from the coordinates; and  
(b) Applying said structure factor information to a set of X-ray diffraction data obtained from a crystal of a protein homologous to SEQ ID NO: 1;  
(c) Solving the three-dimensional structure of the protein homologous to SEQ ID NO: 1.

30

31. A computer readable data storage material encoded with computer readable data comprising structure coordinates of any one or more of Tables 1-4.

32. A computer readable data storage material encoded with computer readable data comprising structure coordinates of the active site of any one or more of Tables 1-4.

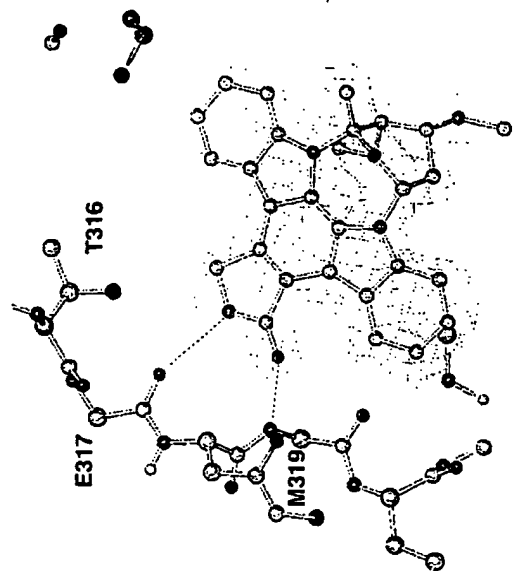
5

33. A method for identifying a potential inhibitor of a kinase comprising:
- (a) selecting or designing a potential inhibitor by performing rational drug design with a computer readable data storage material encoded with computer readable data comprising structure coordinates of any one or more of Tables 1-4, wherein said selecting is performed in conjunction with computer modeling;
  - (b) contacting the potential inhibitor with a kinase; and
  - (c) detecting the ability of the potential inhibitor for inhibiting the kinase.

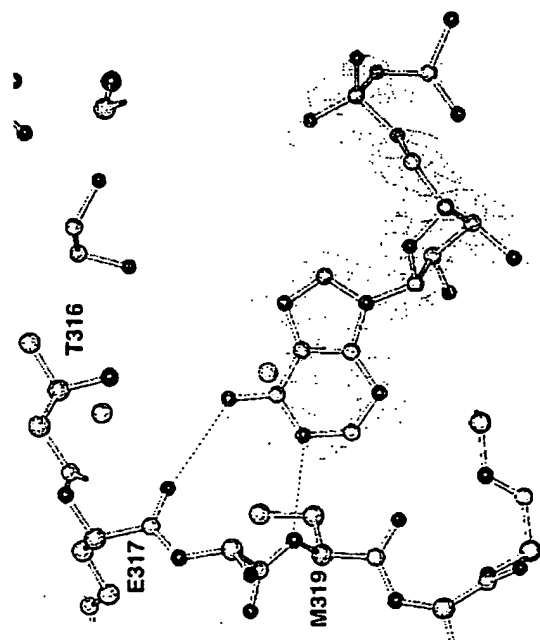
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34. The method of claim 33, wherein the computer readable data storage material is encoded with computer readable data comprising structure coordinates of the active site of any one or more of Tables 1-4.

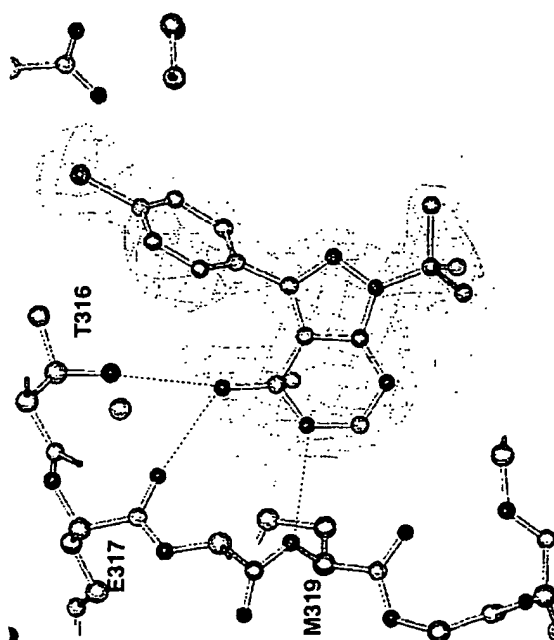
15



B



A



C

Figure 1

Figure 2

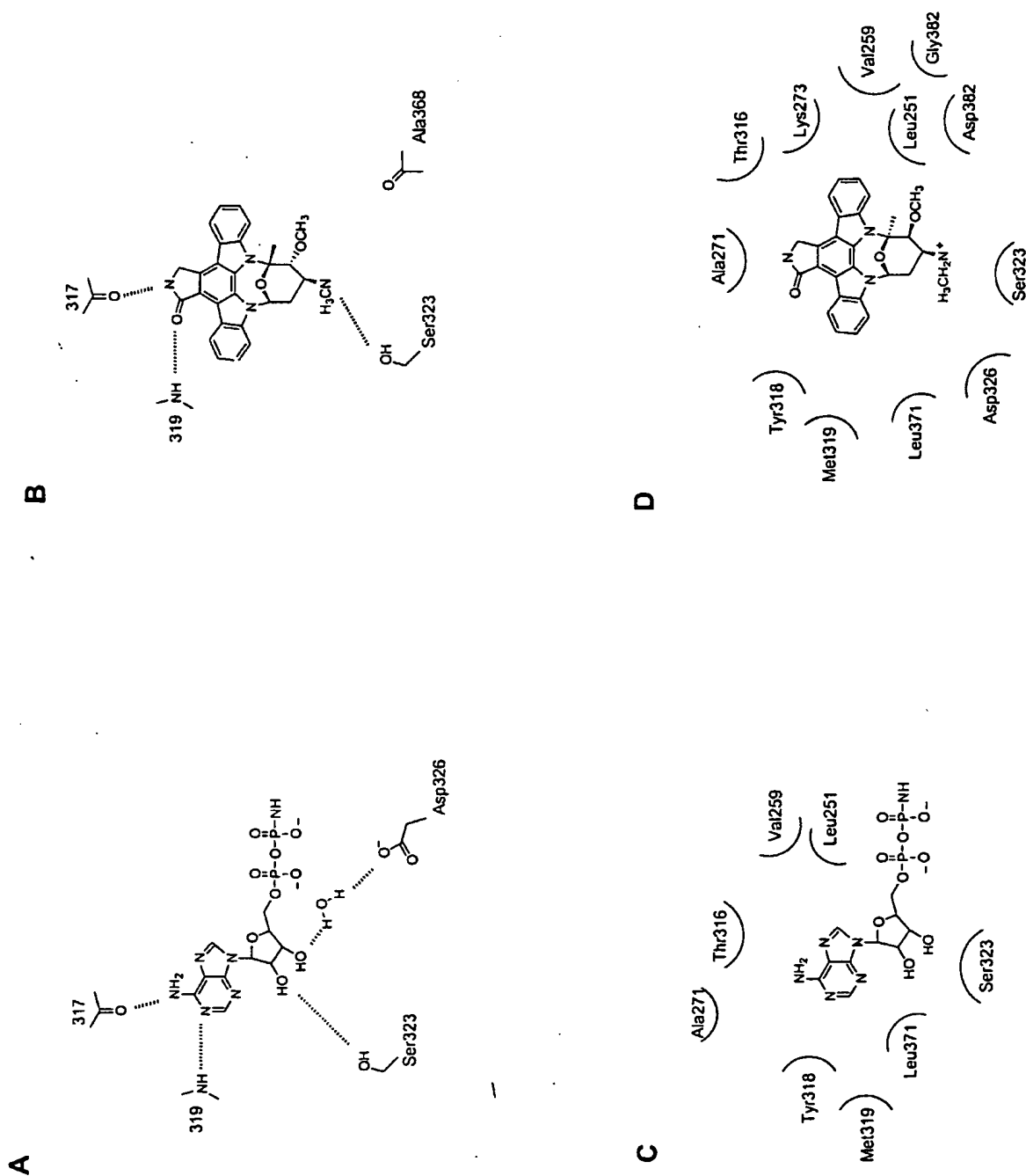
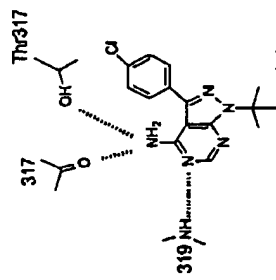
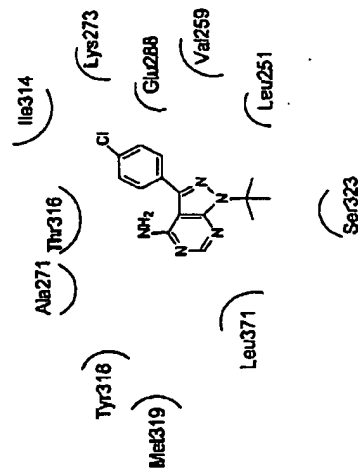


Figure 2

E

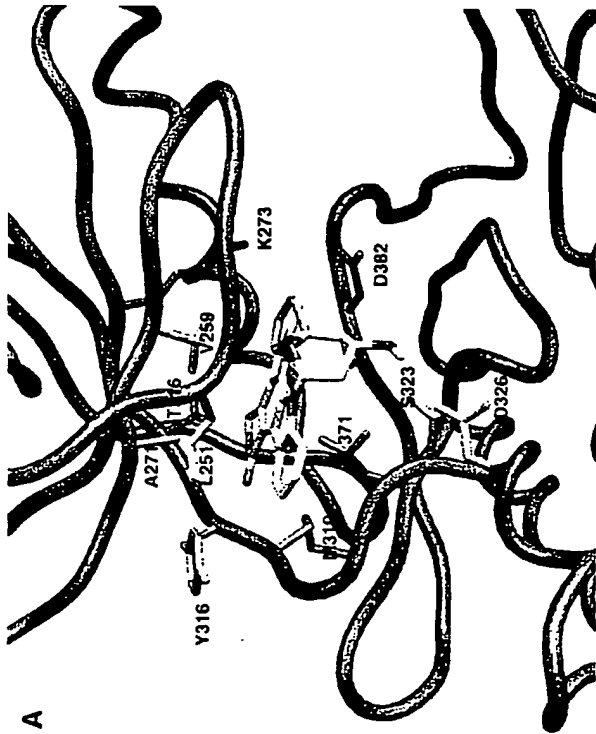


F

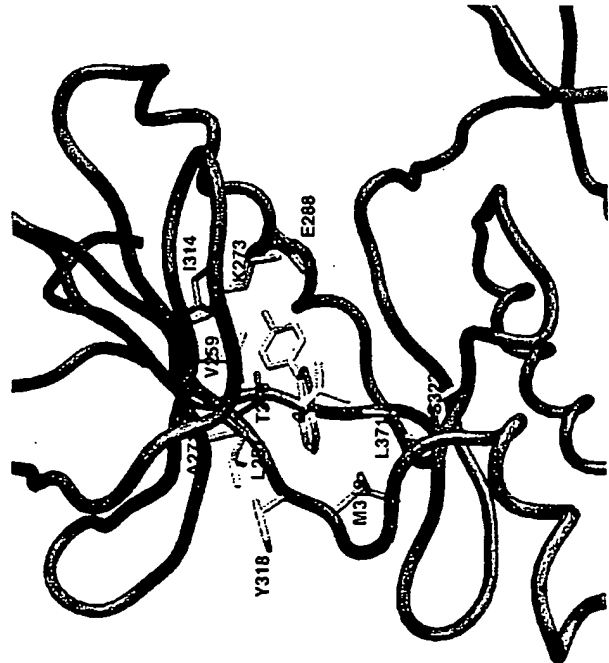




B



A



C

Figure 3



Figure 3



Figure 4





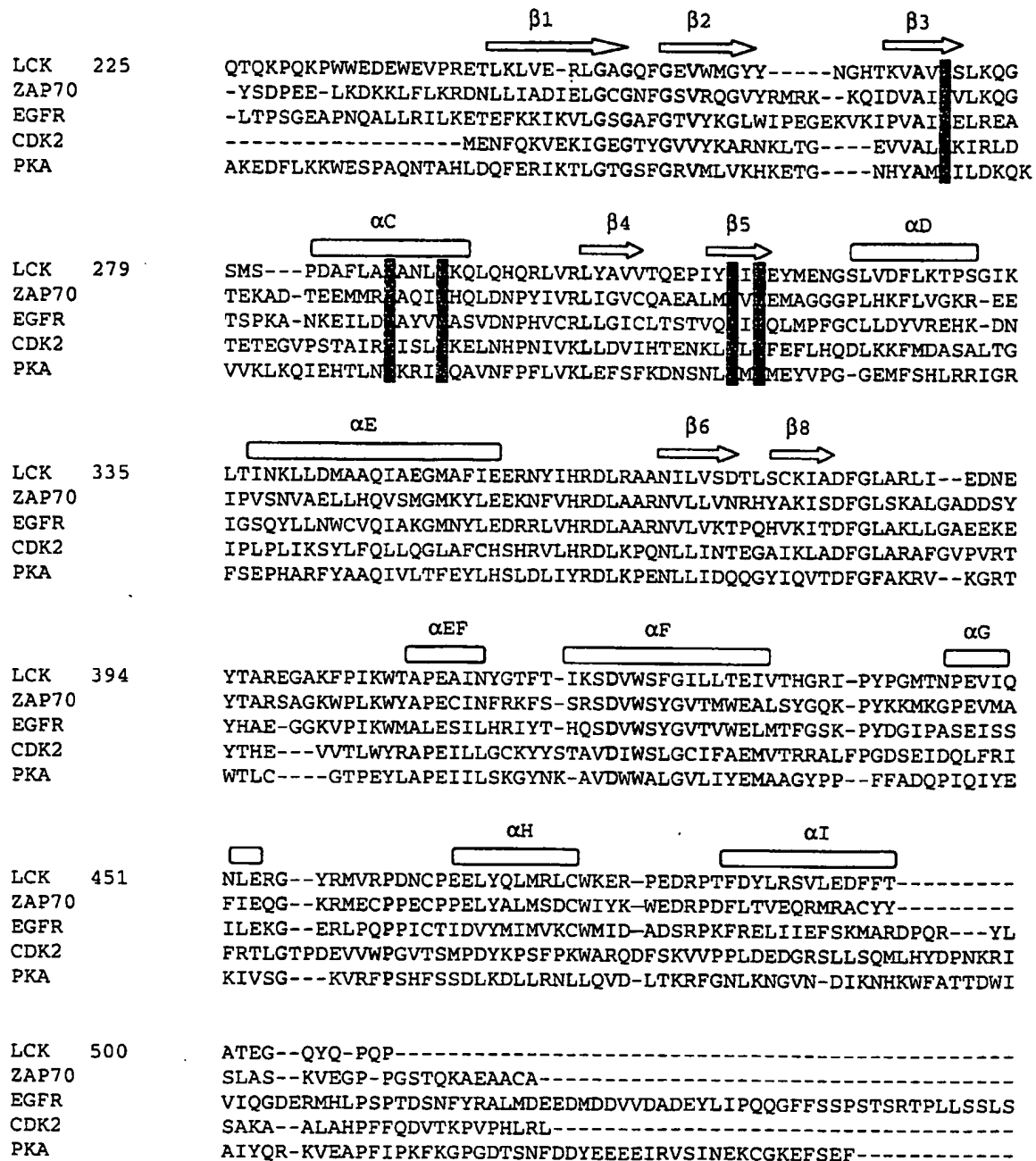


Figure 5

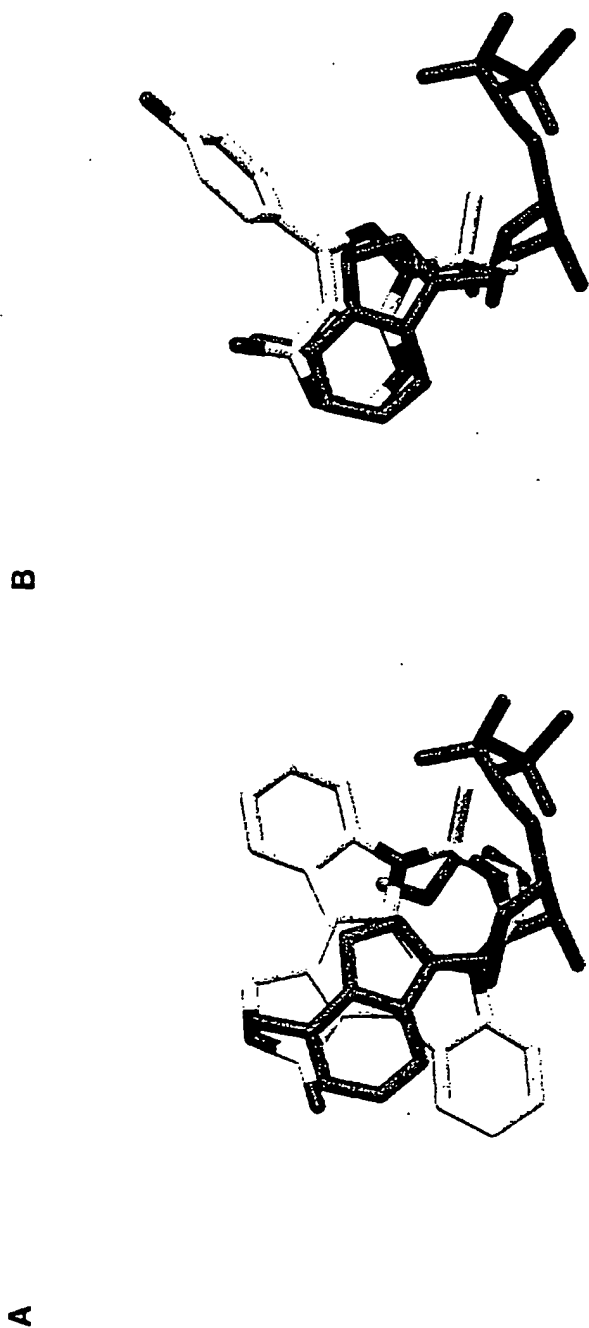


Figure 6

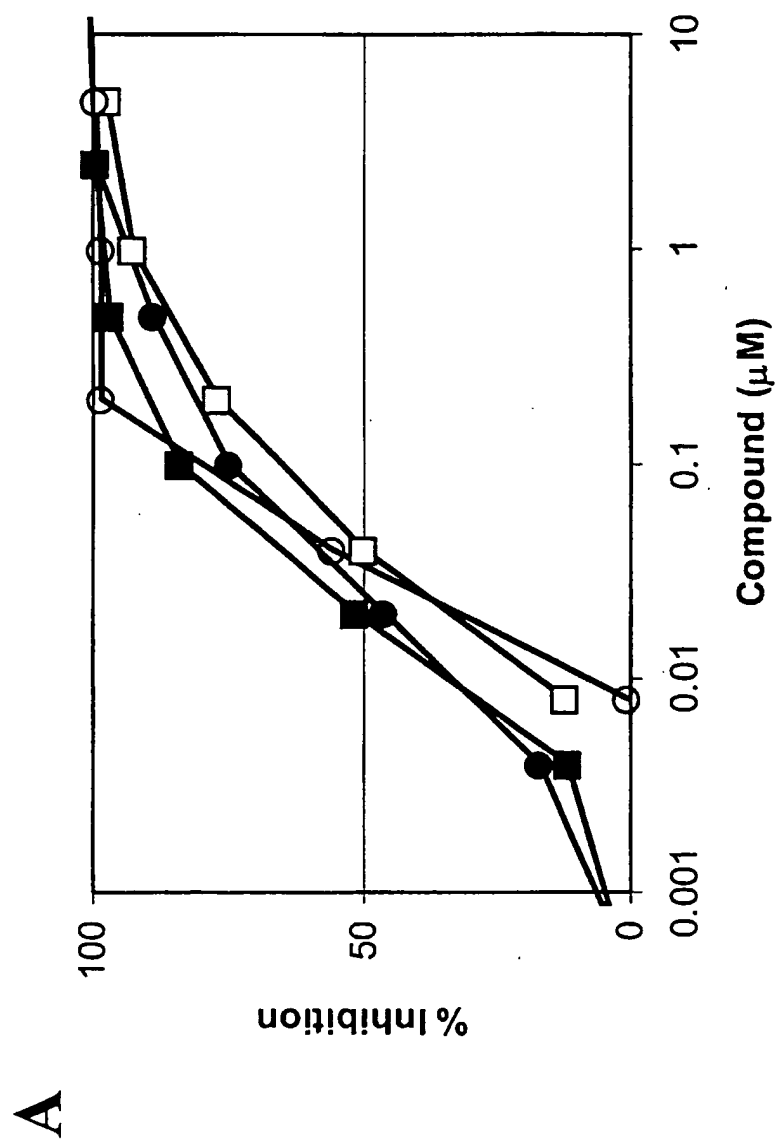
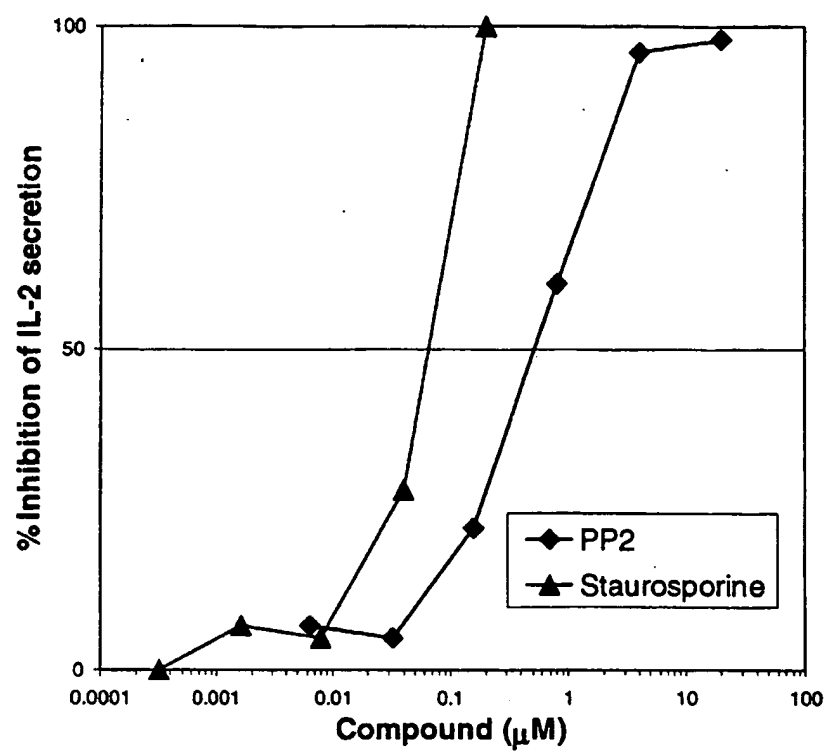


Figure 7

**B****Figure 7**

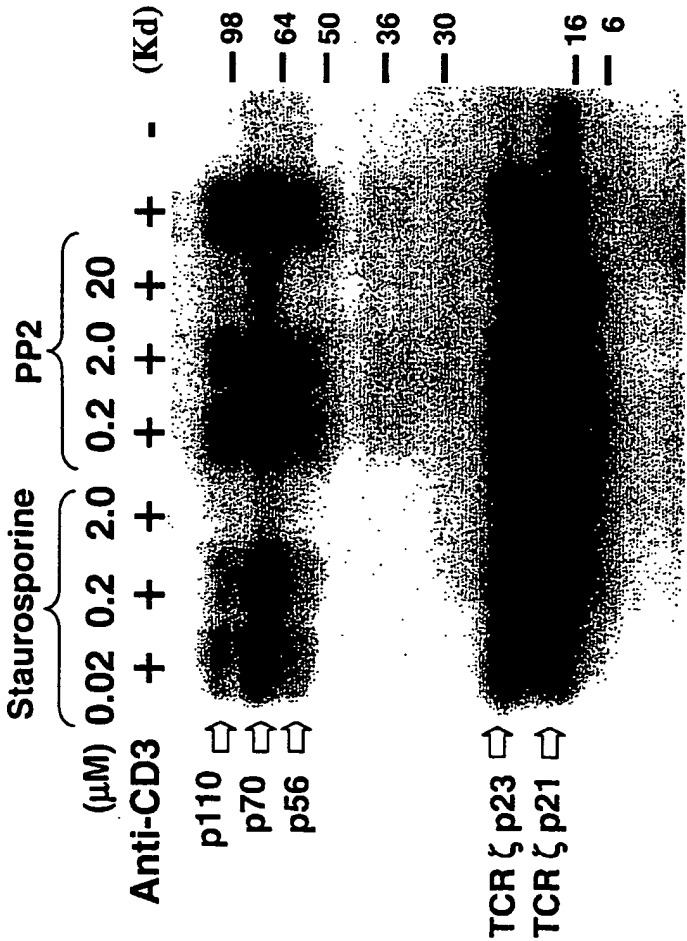


Figure 7 C

## SEQUENCE LISTING

<110> Zhu, Xiaotian  
 <120> Crystal of a Kinase-Ligand Complex and Methods of Use  
 <130> Atty. Docket No.: 11345-005WO1  
 <140> Not Yet Assigned  
 <141> 2000-05-19  
 <160> 1  
 <170> PatentIn Ver. 2.0  
 <210> 1  
 <211> 508  
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 <213> Homo sapiens  
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Gly	Thr	Leu	Leu	Ile	Arg	Asn	Gly	Ser	Glu	Val	Arg	Asp	Pro	Leu	Val	35	40	45	
Thr	Tyr	Glu	Gly	Ser	Asn	Pro	Pro	Ala	Ser	Pro	Leu	Gln	Asp	Asn	Leu	50	55	60	
Val	Ile	Ala	Leu	His	Ser	Tyr	Glu	Pro	Ser	His	Asp	Gly	Asp	Leu	Gly	65	70	75	80
Phe	Glu	Lys	Gly	Glu	Gln	Leu	Arg	Ile	Leu	Glu	Gln	Ser	Gly	Glu	Trp	85	90	95	
Trp	Lys	Ala	Gln	Ser	Leu	Thr	Thr	Gly	Gln	Glu	Gly	Phe	Ile	Pro	Phe	100	105	110	
Asn	Phe	Val	Ala	Lys	Ala	Asn	Ser	Leu	Glu	Pro	Glu	Pro	Trp	Phe	Phe	115	120	125	
Lys	Asn	Leu	Ser	Arg	Lys	Asp	Ala	Glu	Arg	Gln	Leu	Leu	Ala	Pro	Gly	130	135	140	
Asn	Thr	His	Gly	Ser	Phe	Leu	Ile	Arg	Glu	Ser	Glu	Ser	Thr	Ala	Gly	145	150	155	160
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Ser	Pro	Arg	Ile	Thr	Phe	Pro	Gly	Leu	His	Glu	Leu	Val	Arg	His	Tyr	195	200	205	
Thr	Asn	Ala	Ser	Asp	Gly	Leu	Cys	Thr	Arg	Leu	Ser	Arg	Pro	Cys	Gln	210	215	220	

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 Glu Val Trp Met Gly Tyr Tyr Asn Gly His Thr Lys Val Ala Val Lys  
 260 265 270  
 Ser Leu Lys Gln Gly Ser Met Ser Pro Asp Ala Phe Leu Ala Glu Ala  
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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/13881

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 C12N9/12 C12Q1/42

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

BIOSIS, EPO-Internal, WPI Data, CHEM ABS Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	YAMAGUCHI HIROTO ET AL: "Structural basis for activation of human lymphocyte kinase Lck upon tyrosine phosphorylation." NATURE (LONDON), vol. 384, no. 6608, 1996, pages 484-489, XP002147350 ISSN: 0028-0836 cited in the application the whole document	1-34
Y	WO 98 07835 A (SCHLESSINGER JOSEPH ;LIANG CONGXIN (US); SUGEN INC (US); TANG PENG) 26 February 1998 (1998-02-26) the whole document	1-34
	-/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

20 September 2000

Date of mailing of the international search report

04/10/2000

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Authorized officer

Van der Schaal, C.



## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/13881

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JOHNSON LOUISE N ET AL: "The structural basis for substrate recognition and control by protein kinases." FEBS LETTERS, vol. 430, no. 1-2, 23 June 1998 (1998-06-23), pages 1-11, XP002147351 ISSN: 0014-5793 the whole document	1-34
P,X	ZHU XIAOTIAN ET AL: "Structural analysis of the lymphocyte-specific kinase Lck in complex with non-selective and Src family selective kinase inhibitors." STRUCTURE (LONDON), vol. 7, no. 6, June 1999 (1999-06), pages 651-661, XP000946108 ISSN: 0969-2126 the whole document	1-34

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/13881

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9807835 A	26-02-1998	US 5942428 A	24-08-1999
		AU 4160397 A	06-03-1998
		EP 0931152 A	28-07-1999
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PCT

(10) International Publication Number  
**WO 00/070030 A1**

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- (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:  
US 60/134,965 (CIP)  
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- (71) Applicant (for all designated States except US): AMGEN INC. [US/US]; One Amgen Center Drive, Thousand Oaks, CA 91320-1799 (US).
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- (75) Inventor/Applicant (for US only): ZHU, Xiaotian [US/US]; 131 Coolidge Avenue, Apt. 324, Watertown, MA 02472 (US).
- (74) Agent: UNGEMACH, Frank, S.; AMGEN INC., U.S. Patent Operations/FSU, Dept. 4300, M/S 27-4-A, One Amgen Center Drive, Thousand Oaks, CA 91320-1799 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
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see PCT Gazette No. 35/2002 of 29 August 2002, Section II
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CRYSTAL OF A LYMPHOCYTE KINASE-LIGAND COMPLEX AND METHODS OF USE

(57) Abstract: The invention relates to the three-dimensional structure of a crystal of a kinase enzyme complexed with a ligand. The three-dimensional structure of a protein kinase-ligand complex is disclosed. The invention also relates to methods of preparing such crystals. Kinase-ligand crystal structures wherein the ligand is an inhibitor molecule are useful for providing structure information that may be integrated into drug screening and drug design processes. Thus, the invention also relates to methods of using the crystal structure of kinase enzyme-ligand complexes for identifying, designing, selecting, or testing inhibitors of kinase enzymes, such inhibitors being useful as therapeutics for the treatment or modulation of (i) diseases; (ii) disease symptoms; or (iii) the effect of other physiological events mediated by kinases; having one or more kinase enzymes involved in their pathology.

WO 00/070030 A1

## **Crystal of a Kinase - Ligand Complex** **and Methods of Use**

5

This application claims priority benefit under Title 35 USC §119(e) of United States Provisional Application No. 60/134,965, filed May 19, 1999 and entitled *Crystal of a Kinase-Ligand Complex and Methods of Use*, the entire contents of which are incorporated herein by reference.

10

### **Background of the Invention**

The invention relates to the three-dimensional structure of a crystal of a kinase enzyme complexed with a ligand. The three-dimensional structure of a protein kinase-ligand complex is disclosed. The invention also relates to methods of  
15 preparing such crystals. Kinase-ligand crystal structures wherein the ligand is an inhibitor molecule are useful for providing structural information that may be integrated into drug screening and drug design processes. Thus, the invention also relates to methods of using the crystal structure of kinase enzyme-ligand complexes for identifying, designing, selecting, or testing inhibitors of kinase enzymes, such  
20 inhibitors being useful as therapeutics for the treatment or modulation of i) diseases; ii) disease symptoms; or iii) the effect of other physiological events mediated by kinases; having one or more kinase enzymes involved in their pathology.

T-cell activation is a complex process that results from the integrated activation of multiple signal transduction pathways [1-3]. One of the earliest T-cell  
25 signaling events observed upon T-cell receptor (TCR)-ligand engagement is the CD4/CD8-dependent activation of lymphocyte kinase (Lck), a member of the non-receptor Src family of tyrosine kinases [4-8]. Lck phosphorylates and activates a number of substrates necessary for TCR signaling [9]. Perhaps the best understood activity of Lck is the phosphorylation of immunoreceptor tyrosine-based activation  
30 motifs (ITAMs) in the TCR  $\zeta$ -subunit [4, 6, 9]. The extent of  $\zeta$ -chain ITAM phosphorylation dictates the threshold for ligand-mediated TCR signaling and T-cell activation [10, 11]. Phosphorylated ITAMs serve as high affinity docking sites for the recruitment of additional signaling factors, particularly the Syk family tyrosine kinase ZAP-70 [12, 13]. Dual phosphorylation of tyrosines in the ITAMs by Lck is required

for the binding of tandem ZAP-70 Src homology-2 (SH2) domains [14-16]. Co-localization of ZAP-70 and Lck to the TCR- $\zeta$  subunit-CD4/8 complex facilitates the Lck-mediated activation of ZAP-70 and subsequent ZAP-70 autophosphorylation [17-21]. Activated Lck and ZAP-70 perpetuate the TCR signaling cascade by providing  
5 additional docking sites for other SH2 containing kinases (including Fyn, Syk and Itk), adaptor proteins (including SLP-76, SHC, LAT, Fyb and Grap), and transducing elements (including PLC $\gamma$ , PI3-kinase and Rac/Rho) [2, 3, 22]. Biochemical information is then transmitted down multiple signaling pathways, including the Ras/mitogen-activated protein kinase pathway, the phosphatidylinositol pathway, and  
10 the Rho/Rac pathway [2]. Among other effects, TCR signaling up-regulates transcription and translation of IL-2 and IL-2 receptors which are prerequisites for T-cell proliferation.

Genetic studies have demonstrated that Lck expression is restricted to lymphocytes. Loss of Lck expression in human Jurkat T-cells results in a loss of  
15 signaling in response to TCR ligation [23, 24]. In addition, inactivation of the Lck gene, or expression of dominant negative transgenes in mice, results in early arrest of thymocyte maturation [25-27]. These and other biochemical studies have implicated Lck as an essential early mediator of the TCR signaling pathway. Lck therefore represents an attractive target for therapeutic intervention in T-cell mediated disorders  
20 such as autoimmune diseases and transplant rejection.

Lck is a modular protein consisting of a C-terminal catalytic domain, a single Src homology-2 (SH2) and a Src homology-3 (SH3) domain, and a unique N-terminal region. The N-terminal region is involved in anchoring Lck to CD4/8 through Zn<sup>2+</sup> coordination with conserved cysteine residues present in both proteins [28, 29]. The  
25 activity of Lck is regulated by autophosphorylation of Tyr-394 located in the catalytic domain activation loop [30] and by the phosphorylation of Tyr-505 by C-terminal Src kinase (Csk) [31-33]. Further understanding of the regulation of Lck has been provided by the crystal structures of two other Src family protein kinases, c-Src and Hck [34-36]. From these structures it can be delineated that the SH2 and SH3  
30 domains function in part to negatively regulate Lck activity by forming intramolecular contacts that stabilize the catalytic domain in an inactive conformation [37]. The SH2 domain binds to phosphorylated Tyr-505 and the SH3 domain associates with a

proline containing motif in a hinge region connecting the SH2 and catalytic domains [34-36]. Release of these intramolecular regulatory constraints by dephosphorylation of Tyr-505 [38] and/or the presence of competing SH3/SH2 ligands [39] results in the autophosphorylation of Tyr-394 in the activation loop and a catalytically active kinase [19]. A structural basis for Lck activation has been previously elucidated from the crystal structure of an autophosphorylated Lck catalytic domain [40].

Protein kinases have been implicated as potential targets for a variety of clinical applications. The identification of molecules, such as inhibitors, that bind to kinase enzymes, affect kinase activity and thereby influence pathological processes, is valuable for investigating potential therapeutics for disease, or disease symptoms, that are mediated by kinase enzymes. Such identification has been attempted using methods such as the screening of large numbers of random libraries of natural and/or synthetic compounds, hoping that some number of random compounds will demonstrate the desired biological activity. This method is inefficient in that it typically results in a small number of "hits" and it is constrained by the limitations imposed in actually screening large numbers of compounds in laboratory assays. An improved method of such identification is structure-based drug design ("SBDD"). SBDD comprises a number of integrated components, including, structural information (e.g., spectroscopic data such as X-ray or magnetic resonance information, relating to enzyme structure and/or conformation, enzyme-ligand interactions, etc.), computer modeling, medicinal chemistry, and biological testing (both *in vitro* and *in vivo*). These components, each alone and in combination, are useful for accelerating the drug discovery process, for gaining insight into disease and disease processes, and for providing a more efficient method for identifying drug candidates.

Efforts to understand the molecular constraints necessary to achieve inhibitor potency and selectivity have been aided by an increasing number of crystal structures of different protein kinases complexed with ATP-competitive inhibitors. One such inhibitor is staurosporine, an alkaloid that has been previously shown to inhibit a broad range of tyrosine and serine/threonine kinases with nanomolar potency [41]. Crystal structures of staurosporine bound to the serine/threonine kinases protein kinase A (PKA) and the cyclin-dependent kinase 2 (CDK2) elucidated the binding

mode of this inhibitor to protein kinases [42, 43] (reviewed in [44]). A similar binding mode has been reported in a recently solved structure of the tyrosine kinase Csk in complex with staurosporine [45]. Described herein are crystal structures of Lck complexed with staurosporine obtained from both soaking and co-crystallization experiments. Comparison of these two complexes and those previously reported further elucidates the structural basis for the high potency and poor selectivity of this inhibitor.

To date, the three-dimensional structures of Hck/AMP-PNP and Hck/Quercetin complexes have been reported, however, these ligands are not src-selective ligands. The three-dimensional structure of c-Src (apo form) has been elucidated, however, this structure lacks a ligand bound to the enzyme and therefore lacks critical information regarding the interaction of a ligand with the active site of the enzyme.

The role of Src family members Lck and Fyn in TCR activation has been studied with two related Src kinase inhibitors, PP1 and PP2 [51]. PP1 and PP2 are reported to selectively inhibit Lck and c-Src *in vitro* at concentrations much lower than is required to inhibit Zap-70, JAK2, EGF-R kinase and protein kinase A [51]. These compounds also inhibit anti-CD3-induced protein tyrosine phosphorylation and subsequent IL-2 gene activation in T lymphocytes [51]. Thus, it appears that PP1 and PP2 dissect a component of TCR signaling not distinguished by other immunosuppressive drugs such as cyclosporin and FK-506. The structural basis for the potency and selectivity of these compounds with the crystal structure of PP2 bound to Lck is described herein. This structure is a useful tool in the design of specific Lck inhibitors and aids in the tailoring of inhibitors, such as PP1 and PP2, to enhance their physical properties, including their therapeutic and pharmacokinetic properties.

There is a need for three-dimensional structures of kinase-ligand complexes in order to garner a better understanding of the important interactions between a kinase and its bound ligand, and to utilize this information for methods to identify, design and test molecules with improved binding affinity and molecules that would be useful as therapeutics and/or modulators of kinase-mediated physiological events.

### Summary of the Invention

The present invention provides crystals of kinase-ligand complexes suitable for X-ray diffraction analysis. The invention also relates to methods for preparing the crystals of kinase-ligand complexes, particularly where the ligand is an inhibitor of the kinase enzyme. The invention also relates to the detailed three-dimensional structural information of the protein-ligand complexes constituting these crystals, and use of the structure coordinates to reveal atomic details of the active site(s) and other physicochemical interactions that enhance interaction and/or association between the kinase and the ligand. It is also an object of this invention to use the kinase-ligand complex crystals, the three-dimensional structural information provided by the kinase-ligand complex crystals, and the structure coordinates of the kinase-ligand complex in methods to identify, design, select, and evaluate potential inhibitors of kinases that would be useful as therapeutics for diseases or symptoms of diseases that are associated with kinase-mediated physiological events. Such methods may also include use of computer modeling of potential inhibitors based on the the kinase-ligand complex crystals, the three-dimensional structural information of the kinase-ligand complex crystals, and the structure coordinates of the kinase-ligand complex crystals.

### Brief Description of the Drawings

Figure 1. Electron density maps of ligands bound to Lck. 2Fo-Fc electron density maps contoured at  $1\sigma$ . The linker region between the N and C terminal lobe of the Lck kinase domain is shown on the left side of the bound ligands. Hydrogen bonds formed between ligands and the kinase linker region are represented by the purple dashed lines. A. AMP-PNP; B. staurosporine; C. PP2.

Figure 2. Schematic representation of the hydrogen bonding interactions and van der Waals contacts between Lck and the ligands. Hydrogen bonds are represented with dashed lines. The residues of Lck in contact with the bound ligand are shown. A and C. AMP-PNP; B and D. staurosporine; E and F. PP2.



Figure 3. Interactions of staurosporine and PP2 with Lck at the ATP binding cleft. The residues of Lck in contact with the bound ligands are shown in A , B and C. Surface curvature of Lck when bound to ligands is shown in D, E and F. The most convex parts of the molecular surface are coded green while the most concave and planar are coded gray and white, respectively. A & E. staurosporine; C & F. PP2. B and D. AMP-PNP.

Figure 4. Superposition of Lck (green), CDK2 (cyan) and PKA (yellow) in complex with staurosporine (purple). The structure alignment is based on the bound ligands. The Lck:staurosporine co-crystallized complex contains a loop conformation intermediate between the more open and closed positions observed in the CDK2 and PKA complexes.

Figure 5. Structure based sequence alignment of Lck, ZAP-70, the EGF receptor, and PKA. The conserved residues are highlighted in yellow. The amino acids in the hydrophobic pocket where PP2 binds are highlighted in black. Tyrosine 394 on the activation loop is highlighted in purple. The kinase lobe linker region and the catalytic region are labeled.

Figure 6. Comparison of the ligand positions in the Lck complexes based on the superposition of the COs of Lck. A. AMP-PNP (purple) and staurosporine. B. AMP-PNP (purple) and PP2.

Figure 7. A. Enzymatic assay. IC<sub>50</sub> titration curves for an Lck catalytic domain (squares) or the nearly full-length enzyme with SH2 and SH3 regulatory domains (circles). The Lck proteins were titrated with staurosporine (open symbols) and PP2 (filled symbols). B. Cellular assay. PP2 (filled diamonds) and staurosporine (filled triangles) inhibit TCR-induced IL-2 secretion from hPBL T-cells. C. Endogenous protein phosphorylation assay. PP2 and staurosporine inhibit TCR-induced increases in phosphotyrosine incorporation into the TCR p23  $\zeta$ -chain and a 70 kDa protein.

### Detailed Description of the Invention

In order that the invention described herein be more fully understood, the following detailed description is set forth. The interactions of a ligand (e.g., inhibitors AMP-PNP, staurosporine, and PP2) with a kinase are delineated below. For an  
5 overview of kinases, see, *The Protein Kinase Facts Book I & II*, G. Hardie and S. Hanks, eds., Academic Press, (1995).

#### AMP-PNP binding to the Lck catalytic domain

To provide a structural basis for understanding the interactions of  
10 ATP-competitive inhibitors with Lck, the Lck catalytic domain was co-crystallized with the non-hydrolyzable ATP analog AMP-PNP. Consistent with structures of other protein kinases in complex with ATP analogs [46-48], AMP-PNP binds in the cleft between the N- and C-terminal lobes of Lck, with a pair of conserved hydrogen bonds formed between the adenine base and the backbone of the kinase linker region  
15 (Figure 1A & 2A). The gamma phosphate of AMP-PNP is disordered in the binary complex, perhaps due to the absence of a substrate peptide or divalent cations. In ternary complexes of PKA with ATP and a substrate peptide inhibitor [46, 47], and IRK with AMP-PNP and a substrate peptide [48], the bound peptides appear to help anchor the gamma phosphate of ATP to the enzyme. Only small conformational  
20 changes are observed in the Lck:AMP-PNP complex relative to the previously reported apo Lck structure [40]. However, Ser323 undergoes a conformational change in the ribose binding pocket of Lck that appears to be important for AMP-PNP binding. In the apo structure, Ser323 adopts two partially occupied conformations. One conformation results in a hydrogen bond between Ser323 and Asp326. The other  
25 conformation results in Ser323 hydrogen bonding to the backbone carbonyl of Asp368. In both conformations, the Ser323 O $\gamma$  points away from the ATP binding cleft and faces the C-terminal lobe. In the Lck:AMP-PNP structure, the side chain of Ser323 is rotated more than 100 degrees about  $\chi_1$  and forms a hydrogen bond with the ribose oxygen of AMP-PNP (O $\gamma$ :O2' distance 2.7 Å). Ser323 of Lck is conserved  
30 among all known Src-family tyrosine kinases with the exception of Blk, which contains a cysteine at this position.

### Staurosporine binding to Lck

Structures of staurosporine bound to Lck were determined both from apo Lck crystals soaked with. In the Lck:staurosporine complex the inhibitor occupies the ATP binding site and forms three hydrogen bonds with the enzyme. The NH and keto oxygen of the lactam ring of staurosporine make a pair of hydrogen bonds with the carbonyl oxygen of Glu317 and the backbone NH of Met319, similar to those formed by the adenine ring of ATP (Figure 1B and 2B). The third hydrogen bond, which occurs in the ribose binding pocket of Lck, appears to be different in the two complexes. In the Lck:staurosporine complex derived from soaking, the methylamino substituent of the glycosidic ring participates in a hydrogen bond with Ser323 (N:O<sub>y</sub> distance 2.9 Å). This interaction is similar to the hydrogen bond observed between Ser323 and the ribose 2'-hydroxyl in the Lck:AMP-PNP complex.

Staurosporine also makes extensive van der Waals contacts with Lck. Seven residues from the N-terminal lobe (Leu251, Gly252, Val259, Ala271, Lys273, Thr316, and Tyr318) and six residues from the C-terminal lobe (Met319, Gly322, Ser323, Ala368, Leu371, and Asp382) of Lck contribute a total of 78 van der Waals contacts to the bound inhibitor. The majority of these contacts are to the fused carbazole moiety of staurosporine, which spans a plane of approximately 15x11 Å<sup>2</sup>. In contrast, the glycosidic group of staurosporine spans only 6 Å in a direction perpendicular to the plane of carbazole ring system. Approximately half of the van der Waals interactions result from a large movement of the glycine rich loop of Lck, induced by staurosporine binding. .

Crystal structures of the protein kinases CDK2, PKA and CSK in complex with staurosporine have also been reported [42, 43, 45]. The same hydrogen bonding pattern observed between the lactam of staurosporine and the linker region of Lck is observed in each of these crystal structures. Inspection of the PKA:staurosporine and CDK2:staurosporine complexes (CSK coordinates not available) reveals that the CH-O interaction described above for our two Lck:staurosporine structures is present as the closest contact between staurosporine and the glycine rich loop in these structures as well. Not only are the CH-O distances constant in the four complexes (3.5 Å), but the geometry of the interaction is similar as well. This type of CH-O interaction is well documented in small molecule crystal

structures [49] and has also been observed in other biomolecular complexes [50]. Interestingly, both PKA and CDK2 undergo conformational changes in the glycine rich loop upon staurosporine binding, and while this loop contains additional conformational differences in the CDK2 complex (Figure 4), the glycine  
5 C $\alpha$ :glycosidic oxygen interaction is maintained. This emphasizes the importance of this interaction in complexes between staurosporine and Ser/Thr and tyrosine kinases. It appears that this interaction is critical for the potency of staurosporine binding to the ATP binding site of these kinases.

In both the Lck and CSK complexes a single hydrogen bond is formed  
10 between staurosporine and the ribose binding pocket [45]. In comparison, staurosporine has been observed to form two hydrogen bonds with this pocket in CDK2 and PKA [42, 43]. In these two complexes rotation about the C-N bond of the methylamino substituent allows the amine nitrogen to hydrogen bond to both a carbonyl oxygen from the catalytic loop and a side chain from the ribose binding  
15 pocket. Of the two methylamino hydrogen bonding interactions observed in our Lck:staurosporine complex, the contact with the carbonyl oxygen of Ala368 more closely resembles the interactions observed in the PKA and CDK2 complexes. The distance between this carbonyl oxygen and the C $\alpha$  of Gly252 is 10.3 Å for the Lck:staurosporine complex. The equivalent distances in the PKA and CDK2  
20 structures are 9.0 Å and 8.8 Å, respectively.

#### PP2 binding to Lck

PP2 has been reported to be a potent Src family selective tyrosine kinase inhibitor [51]. This compound inhibits Lck with an IC<sub>50</sub> of 4nM and Fyn with an IC<sub>50</sub> of 5nM. PP2 is slightly less potent against EGF-R (IC<sub>50</sub> = 0.45 μM) and inactive  
25 against ZAP-70 (IC<sub>50</sub> = 100 μM) [51]. PP1, an analog of PP2, shows approximately the same inhibitory activity against Lck [51]. To determine the structural basis for this selectivity, PP2 was co-crystallized with the kinase domain of Lck. This structure reveals that PP2 binds in the ATP binding site and induces little global conformational change in the enzyme. Superimposition of the Lck:PP2 and  
30 Lck:AMP-PNP structures yields an overall rms difference of 0.27 Å for the 278 C $\alpha$  atoms. The pyrazolo-pyrimidine ring of PP2 occupies a similar position in the Lck ATP binding cleft as the adenine ring of AMP-PNP (Figure 1C & 2C). This binding

mode places the 3-(4-chlorophenyl) substituent of PP2 in a hydrophobic pocket adjacent to the ATP binding cleft (Figure 3B & 3D). PP2 forms three hydrogen bonds with Lck, two of which are similar to those found in the Lck:AMP-PNP and Lck:staurosporine structures (Figure 1C & 2C). These are between the 4-amino group of PP2 and the backbone carbonyl of Glu317, and between the N5 of PP2 and the backbone NH of Met319. The third hydrogen bond, formed between the 4-amino group of PP2 and the side chain hydroxyl of Thr316, is unique in the structures reported here. The two conserved hydrogen bonds in the PP2:Lck complex are relatively long, with distances between donor and acceptor atoms of approximately 3.2 Å. PP2 also makes thirty-eight van der Waals interactions with Lck. Nineteen of these contacts come from the 3-(4-chlorophenyl) substituent, which is deeply buried inside the hydrophobic pocket. The *tert*-butyl substituent of the pyrazolo-pyrimidine contributes four van der Waals contacts to the complex. This substituent is located at the entrance of the ATP binding pocket and contacts residues from both the N- and C-terminal lobes of Lck.

The hydrophobic pocket occupied by the 3-(4-chlorophenyl) substituent of PP2 is defined by residues Thr316, Ile314, Met292, Glu288 and Lys273. The exact composition of this pocket appears to be unique to the Src family (Figure 5). For instance, Thr316, which is located at the entrance of the hydrophobic pocket, is not conserved in other tyrosine kinase families. ZAP-70 contains a methionine at this position which is likely to block access of this pocket to PP2-like inhibitors. This is consistent with the 100  $\mu$ M  $IC_{50}$  previously reported for PP2 against ZAP-70 [51]. Like Lck, the EGF receptor kinase has a threonine at the entrance of the hydrophobic pocket and is inhibited moderately by PP2 ( $IC_{50}$  = 0.45  $\mu$ M) [51]. The hydrophobic pocket in EGFR differs from the Src kinases by having a leucine at the position equivalent to Ile314 in Lck. In the Lck:PP2 complex, Ile314 contacts the 4-chloro substituent of the 3-phenyl ring. The presence of a leucine at this position in EGFR could partially account for the weaker inhibition of this receptor tyrosine kinase by PP2.

The structure of the Lck:PP2 complex helps explain the structure activity relationships (SAR) of a series of 4-Amino-1,3-diphenyl-pyrrolo[3,4d]pyrimidines that show a high degree of specificity towards c-Src [52]. The molecular structures of

these compounds are analogous to PP2, but have a phenyl ring at the N1 position of the pyrrole instead of a *tert*-butyl group (Figure 6C). A wide variety of polar moieties are well tolerated on this phenyl ring. The amino acid identity of the active sites of Lck and Src (defined as a 10 Å radius around ATP) is 89%. The amino acid  
5 composition of the ribose binding pocket within the Src family is completely conserved, while the hydrophobic pocket is less conserved. Superimposition of several of these compounds on our Lck:PP2 complex indicates that the polar groups on the N1-phenyl ring can interact favorably with hydrophilic residues in the ribose binding pocket (Ser343, Asp345), while the 3-phenyl group occupies the same region  
10 of the hydrophobic pocket as the 3-(4-chlorophenyl) group of PP2.

#### Comparison of ligand binding to Lck

Superimposition of the Lck:AMP-PNP, Lck:staurosporine and Lck:PP2 structures highlights similar features of inhibitor binding to the enzyme. The aromatic  
15 ring systems of the bound inhibitors occupy similar positions in the adenine binding pocket, as do their hydrogen bond donors and acceptors (Figure 6A & 6B). This results in a hydrogen bonding pattern to the backbone carbonyl of Glu317 and the amide of Met319 that is conserved in all three structures (Figure 1 & 2).

Staurosporine makes significantly more interactions with the glycine rich loop  
20 of Lck than does either AMP-PNP or PP2. The majority of these interactions are with residues that are highly conserved among protein kinases. These include Leu251, Gly252, Val259, Ala271, Lys273, Gly322 and Leu371, residues which are either absolutely or highly conserved among known tyrosine kinase sequences. PP2 by contrast, makes a number of interactions with residues that are specific to the Src  
25 family kinases by accessing a hydrophobic pocket neighboring the adenine binding region of Lck. This hydrophobic pocket exists in other kinases as well and has been exploited in the discovery of specific inhibitors. For example, the structures of FGF receptor and p38 MAP kinases bound with specific inhibitors show that the inhibitors gain both potency and specificity by placing substituents in this hydrophobic pocket  
30 of the enzyme [53-56]. However, the exact position and topology of the hydrophobic pockets of Lck, FGF-R, p38 and other kinases are likely to be defined not only by sequence but by additional factors, such as activation state or relative positioning of

the kinase N- and C-terminal domains. This diversity around the ATP-binding site provides opportunities for the discovery or design of potent, selective, small molecule inhibitors for specific protein kinases.

5    Inhibition of Lck activity and T-cell receptor signaling

          In the crystallographic studies presented here, the catalytic domain of Lck was used as a substitute for the full length protein. Previous studies have demonstrated that the Lck catalytic domain can be expressed and isolated as a constitutively active enzyme [40]. Nevertheless, a detailed comparison of the catalytic activities of Lck in  
10    the full length and truncated forms has not been reported. To provide a basis for the physiological relevance of our crystallographic studies, the  $IC_{50}$  values of staurosporine and PP2 were measured against these two forms of Lck. The full-length and catalytic domains of Lck displayed comparable specific activities (10 and 15 nmoles/min/nM enzyme) when assayed using a poly-GluTyr substrate. Furthermore,  
15    staurosporine ( $IC_{50}$  full length = 34 nM, kinase domain = 40 nM) and PP2 ( $IC_{50}$  full length = 19 nM, kinase domain = 20 nM) each inhibited both the full length and truncated forms of Lck to a similar extent in an autophosphorylation assay (Figure 7A).

          The effect of staurosporine and PP2 on Lck-mediated phosphorylation of TCR  
20     $\zeta$ -chain and IL-2 production in human T-cells was also investigated. Both inhibitors showed a dose-dependent inhibition of Lck-dependent phosphorylation of the TCR  $\zeta$ -chain (p23), and also inhibited the phosphorylation of a 70 kD protein which is likely to be ZAP-70 (Figure 7C). Figure 7, panel B shows that staurosporine ( $IC_{50}$  = 60 nM) and PP2 ( $IC_{50}$  = 600 nM) also exhibited dose-dependent inhibition of IL-2 production  
25    in human T-cell cultures. The results of these *in vitro* and cellular studies suggests that the catalytic domain of Lck is a valid substitute for the full-length Lck as a molecular target for the development of new immunosuppressive therapeutic agents.

          Biological significance

30           The molecular targets of currently used immunosuppressive drugs such as FK-506 and cyclosporine are broadly expressed in many different tissues and cell types. The non-immunosuppressant toxicity profiles of such drugs can be traced to the

inhibition of their targets in non-lymphoid tissues. Targeting Lck for the development of novel immunosuppressive drugs has promise as this enzyme is selectively expressed in T-cells and NK cells. Thus, agents that selectively inhibit Lck could lead to T-cell specific immunosuppression with improved therapeutic windows and broader clinical potential.

In the past few years much progress has been made in the design of selective kinase inhibitors. It has been established that highly specific ATP-competitive inhibitors can be obtained against a number of different kinases with clinical utility in oncology. In the present study, a comparison of several ligated Lck structures has provided valuable insight into the mode of binding of non-selective and Src family selective inhibitors. The structure of Lck in complex with AMP-PNP likely represents a conformation of Lck when ATP is bound prior to the binding of substrates and phospho-transfer. Analysis of the Lck:staurosporine complex reveals that binding of this inhibitor to Lck and other kinases induces a conformational change in the glycine rich loop, which helps maximize van der Waals interactions. This conformational change is mediated by a CH-O interaction that appears to be a common binding component for staurosporine with protein kinases. The non-selectivity of staurosporine may be explained by interactions with residues that are highly conserved in the ATP binding cleft. In contrast, the Src-selective inhibitor PP2 binds to Lck by accessing a hydrophobic pocket whose composition is unique to the Src family. The structures of these Lck complexes offer useful structural insights as they demonstrate binding modes that make differential use of various regions of the ATP binding cleft. Furthermore, these complexes indicate that kinase selectivity can be achieved with small molecule inhibitors that exploit subtle topological differences or sequence substitutions among protein kinases.

As used herein, the terms "sequence homology", or "homology", or "homologues", refers to the degree of identity or correspondence between nucleic acid or amino acid sequences of proteins. In a specific embodiment, two DNA sequences are "substantially homologous" or "substantially similar" when at least about 50% (preferably at least about 75% and most preferably at least about 90 or 95%) of the nucleotides match over the defined length of the DNA sequences. Sequences that are substantially homologous can be identified by comparing the sequences using



standard software available in sequence data banks, or in a Southern hybridization experiment under, for example, stringent conditions as defined for that particular system. Defining appropriate hybridization conditions is within the skill of the art. See, e.g., [Maniatis et al., *Molecular Cloning: A Laboratory Manual*, Second Edition, 5 (1989); *DNA Cloning, Vols. I & II*, (D. Glover, ed. 1985); *Nucleic Acid Hybridization*, B.D. Hames & S.J. Higgins, eds., (1985); *Current Protocols in Molecular Biology*, John Wiley & Sons, Inc. (1994); and references cited therein].

Similarly, in a particular embodiment, two amino acid sequences are "substantially homologous" or "substantially similar" when greater than about 30%, 10 alternatively greater than about 70%, or alternatively greater than about 90% of the amino acids are identical, or when greater than about 60%, alternatively greater than about 75%, or alternatively greater than 90% are similar (functionally identical). Preferably, the similar or homologous sequences are identified by alignment using, for example, the GCG (Genetics Computer Group, Program Manual for the GCG 15 Package, Version 7, Madison, WI) pileup program.

The term "active site" refers to any or all of the following: (i) the portion of the kinase sequence that binds to substrate, (ii) the portion of the kinase sequence that binds to an inhibitor, (iii) the portion of the kinase sequence that binds to ATP. The active site may also be characterized as comprising at least amino acid residues 259, 20 271, 371, 319, 251, 323, 314, 292, 316, 288, 273, 319, 320 and 317 of SEQ ID NO: 1.

Due to the degeneracy of nucleotide coding sequences, other DNA sequences which encode substantially the same amino acid sequence as a kinase gene may be used in the practice of the present invention. These include but are not limited to allelic genes, homologous genes from other species, and nucleotide sequences 25 comprising all or portions of kinase genes which are altered by the substitution of different codons that encode the same amino acid residue within the sequence, thus producing a silent change. Likewise, the kinase derivatives of the invention include, but are not limited to, those containing, as a primary amino acid sequence, all or part of the amino acid sequence of a kinase protein including altered sequences in which 30 functionally equivalent amino acid residues are substituted for residues within the sequence resulting in a conservative amino acid substitution. For example, one or more amino acid residues within the sequence can be substituted by another amino

acid of a similar polarity, which acts as a functional equivalent, resulting in a silent alteration. Substitutes for an amino acid within the sequence may be selected from other members of the class to which the amino acid belongs. For example, the nonpolar (hydrophobic) amino acids include alanine, leucine, isoleucine, valine, 5 proline, phenylalanine, tryptophan and methionine. Amino acids containing aromatic ring structures are phenylalanine, tryptophan, and tyrosine. The polar neutral amino acids include glycine, serine, threonine, cysteine, tyrosine, asparagine, and glutamine. The positively charged (basic) amino acids include arginine, lysine, and histidine. The negatively charged (acidic) amino acids include aspartic acid and glutamic acid. 10 Such alterations will not be expected to affect apparent molecular weight as determined by polyacrylamide gel electrophoresis, or isoelectric point. Abbreviations of amino acids are known in the art and are defined below:

	A = Ala = alanine	T = Thr = threonine
	V = Val = valine	C = Cys = cysteine
15	L = Leu = leucine	Y = Tyr = tyrosine
	I = Ile = isoleucine	N = Asn = asparagine
	P = Pro = proline	Q = Gln = glutamine
	F = Phe = phenylalanine	D = Asp = aspartic acid
	W = Trp = tryptophan	E = Glu = glutamic acid
20	M = Met = methionine	K = Lys = lysine
	G = Gly = glycine	R = Arg = arginine
	S = Ser = serine	H = His = histidine

The term "structure coordinates" refers to three-dimensional atomic coordinates derived from mathematical equations related to the experimentally 25 measured intensities obtained upon diffraction of a mono- or polychromatic beam of X-rays by the atoms (scattering centers) of a kinase or kinase-ligand complex in crystal form. The diffraction data may be used to calculate an electron density map of the repeating unit of the crystal. The electron density maps can be used to establish the positions of the individual atoms within the unit cell of the crystal. Alternatively, 30 computer programs such as XPLOR can be used to establish and refine the positions of individual atoms. Those of skill in the art understand that a set of structure coordinates determined by X-ray crystallography is not without error. For the

purposes of this invention, any set of structure coordinates for a kinase, particularly a src-family kinase, and more particularly Lck, or Lck homologues, that have a root mean square deviation of equivalent protein backbone atoms (N, C $\alpha$ , C and O) of less than about 1.50 Å, or alternatively less than about 1.00Å when superimposed, using  
5 backbone atoms, on the structure coordinates listed herein shall be considered identical and within the scope of the invention.

The term "unit cell" refers to a basic parallelepiped shaped block. The entire volume of a crystal may be constructed by regular assembly of such blocks. Each unit cell comprises a complete representation of the unit of pattern, the repetition of which  
10 builds up the crystal.

The term "space group" refers to the arrangement of symmetry elements of a crystal.

The term "complex" refers to a kinase (or kinase truncation or homologue) in covalent or non-covalent association with a ligand, such ligand including, for  
15 example, a chemical entity, compound, or inhibitor, candidate drug, and the like. The term "association" refers to a condition of proximity between the ligand and the kinase, or their respective portions thereof, in any appropriate physicochemical interaction.

The term "kinase", unless expressly stated to the contrary, refers to full length  
20 as well as truncated protein sequences, or subsequences, and homologues.

The term "globular core" refers to the general spatial shape of the of the core of the kinase enzyme.

The invention relates to a crystal of a protein-ligand complex comprising a protein-ligand complex of a kinase and a ligand, wherein the crystal effectively  
25 diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater (meaning better as used in this context throughout) than 5.0 Angstroms, alternatively greater than 3.0 Angstroms, or alternatively greater than 2.0 Angstroms; and wherein the kinase comprises amino acids 225 to 508 of SEQ ID NO: 1 or an amino acid sequence that differs from amino acids 225 to 508 of  
30 SEQ ID NO: 1 by only conservative substitutions; alternatively, wherein said kinase comprises the active site as defined herein. The invention also relates to a crystal of a protein-ligand complex comprising a protein-ligand complex of a kinase and a ligand,

wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms, alternatively greater than 3.0 Angstroms, or alternatively greater than 2.0 Angstroms; and wherein the kinase: (a) comprises amino acids 225 to 508 of SEQ ID NO: 1 or an amino acid sequence that differs from amino acids 225 to 508 of SEQ ID NO: 1 by only conservative substitutions (or alternatively, wherein said kinase comprises the active site as defined herein); and (b) retains the globular core of the corresponding full-length kinase. Other embodiments include the crystals above wherein the kinase is alternatively a src-family kinase, or alternatively Lck, or alternatively a truncated Lck sequence; those crystals above wherein the ligand is AMP-PNP, staurosporine or PP2, or alternatively AMP-PNP, or alternatively staurosporine, or alternatively PP2; and those wherein the ligand is Lck and the ligand is AMP-PNP, staurosporine or PP2, or alternatively AMP-PNP, or alternatively staurosporine, or alternatively PP2.

15 An alternate embodiment is the crystal of described above, wherein the kinase, or alternatively src-family kinase, or alternatively Lck, or alternatively truncated Lck, comprises an amino acid sequence of amino acids 251 to 371 of SEQ ID NO: 1, or an amino acid sequence that differs from amino acids 251 to 371 of SEQ ID NO: 1 by only conservative substitutions, or alternatively, wherein said kinase comprises the active site as defined herein. Other embodiments include such crystals wherein the kinase is alternatively a src-family kinase, or alternatively Lck, or alternatively a truncated Lck sequence; those crystals above wherein the ligand is AMP-PNP, staurosporine or PP2, or alternatively AMP-PNP, or alternatively staurosporine, or alternatively PP2; and those wherein the ligand is Lck and the ligand is AMP-PNP, staurosporine or PP2, or alternatively AMP-PNP, or alternatively staurosporine, or alternatively PP2.

An alternate embodiment is the crystal described above wherein the kinase-ligand complex comprises AMP-PNP and having space group of  $P2_12_12_1$  and a unit cell of dimensions of  $a = 42.1 \text{ \AA}$ ,  $b = 73.7 \text{ \AA}$ , and  $c = 91.7 \text{ \AA}$ .

30 An alternate embodiment is the crystal described above wherein the kinase-ligand complex comprises staurosporine and having space group of  $P2_12_12_1$  and a unit cell of dimensions of  $a = 42.2 \text{ \AA}$ ,  $b = 73.8 \text{ \AA}$ , and  $c = 91.4 \text{ \AA}$ .

An alternate embodiment is the crystal described above wherein the kinase-ligand complex comprises staurosporine and having space group of  $P2_12_12_1$  and a unit cell of dimensions of  $a = 61.5 \text{ \AA}$ ,  $b = 69.0 \text{ \AA}$ , and  $c = 73.7 \text{ \AA}$ .

5 An alternate embodiment is the crystal described above wherein the kinase-ligand complex comprises PP2 and having space group of  $P2_12_12_1$  and a unit cell of dimensions of  $a = 42.0 \text{ \AA}$ ,  $b = 73.7 \text{ \AA}$ , and  $c = 91.6 \text{ \AA}$ .

An alternate embodiment is the crystal described above wherein the kinase has secondary structural elements that include five beta strands and one helix in the N-terminal lobe (strands 1, 2, 3, 4 and 5 and alpha helix C), and two beta strands and  
10 seven alpha helices in the C-terminal domain (strands 6 & 8, and alpha helices D, E, EF, F, G, H and I).

Another embodiment is a method of using the kinase-ligand crystals described herein in an inhibitor screening assay comprising:

- 15 (a) selecting a potential inhibitor by performing rational drug design with the three-dimensional structure determined for the crystal, wherein said selecting is performed in conjunction with computer modeling;
- (b) contacting the potential inhibitor with the kinase; and
- (c) detecting the ability of the potential inhibitor for inhibiting the kinase.

Alternate embodiments are those wherein the detecting the ability of the potential  
20 inhibitor for inhibiting the kinase in step (c) is performed using an enzyme inhibition assay, or alternatively those wherein the detecting the ability of the potential inhibitor for inhibiting the kinase in step (c) is performed using a cellular-based assay. A further embodiment is this method further comprising:

- 25 (d) growing a supplemental crystal comprising a protein-ligand complex formed between the kinase and a first potential inhibitor from step (a), wherein the supplemental crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms;
- (e) determining the three-dimensional structure of the supplemental  
30 crystal;
- (f) selecting a second potential inhibitor by performing rational drug design with the three-dimensional structure determined for the

supplemental crystal, wherein said selecting is performed in conjunction with computer modeling;

(g) contacting the second potential inhibitor with the kinase; and

(h) detecting the ability of the second potential inhibitor for inhibiting the kinase.

5

In another embodiment, the invention relates to a method for identifying a potential inhibitor of kinase comprising:

(a) selecting or designing a potential inhibitor by performing rational drug design with the three-dimensional structure coordinates of any of Tables 1-4, or alternatively any two or more of Tables 1-4, wherein said selecting is performed in conjunction with computer modeling;

10

(b) contacting the potential inhibitor with the kinase; and

(c) detecting the ability of the potential inhibitor for inhibiting the kinase.

15

Alternate embodiments are those wherein the detecting the ability of the potential inhibitor for inhibiting the kinase in step (c) is performed using an enzyme inhibition assay, or alternatively those wherein the detecting the ability of the potential inhibitor for inhibiting the kinase in step (c) is performed using a cellular-based assay. In another embodiment, the potential inhibitor is designed *de novo*. In yet another embodiment, the potential inhibitor is designed from a known inhibitor. A further embodiment is this method further comprising:

20

(d) selecting an second potential inhibitor by performing rational drug design with the three-dimensional structure coordinates of any of Tables 1-4, or alternatively any combination of two or more of Tables 1-4, and the potential inhibitor of step (a), wherein said selecting is performed in conjunction with computer modeling;

25

(e) contacting the potential inhibitor with a kinase; and

(f) detecting the ability of the potential inhibitor for inhibiting the kinase.

In an alternate embodiment, the invention relates to a method of using the kinase to grow a crystal of a protein-ligand complex comprising:

30

(a) contacting a kinase with a ligand, wherein the kinase forms a protein-ligand complex with the ligand; and

(b) growing the crystal of the protein-ligand complex; wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms.

5 An alternate embodiment is this method wherein said growing is performed by hanging drop vapor diffusion. Another embodiment is this method wherein said ligand is PP2, staurosporine or AMP-PNP, or alternatively, said ligand is PP2.

In an alternate embodiment, the invention relates to a method of using a kinase to produce a crystal of a protein-ligand complex comprising contacting a  
10 kinase crystal with a ligand, wherein the kinase forms a protein-ligand complex with the ligand within the crystal, and wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms. Another embodiment is this method wherein said ligand is PP2, staurosporine or AMP-PNP, or alternatively, said ligand is PP2.

15 In an alternate embodiment, the invention relates to a method of growing a crystal of a kinase-ligand complex wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms, comprising:

(a) contacting a kinase solution with a ligand, wherein kinase forms a  
20 protein-ligand complex with the ligand; and

(b) growing the crystal of the protein-ligand complex; wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms.

25 An alternate embodiment is this method wherein said growing is performed by hanging drop vapor diffusion. Another embodiment is this method wherein said ligand is PP2, staurosporine or AMP-PNP, or alternatively, said ligand is PP2.

In another embodiment, this invention relates to a method of producing a crystal of a kinase-ligand complex wherein the crystal effectively diffracts X-rays for  
30 the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms, comprising contacting a kinase crystal with a ligand, wherein the kinase forms a protein-ligand complex with the ligand within the

crystal, and wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms. An alternate embodiment is this method wherein said ligand is PP2, staurosporine or AMP-PNP, or alternatively, said ligand is PP2.

5 Alternate embodiments of the invention are those crystals, and methods of using such crystals or structure coordinates thereof, described herein wherein the crystals further comprise a nucleoside or nucleotide cofactor or substrate, or further comprise any one of ATP, GTP, Mg, Mn, peptides or polymeric amino acids.

In each of the methods described herein, further embodiments are those  
10 wherein the kinase is a src-family kinase, alternatively Lck, or alternatively, truncated Lck.

In another embodiment, the invention relates to a method of using the three-dimensional structure coordinates of any one of Tables 1-4, or alternatively any combination of two or more of Tables 1-4, comprising:

- 15 (a) Determining structure factors from the coordinates; and  
(b) Applying said structure factor information to a set of X-ray diffraction data obtained from a crystal of a protein homologous to SEQ ID NO: 1;  
(c) Solving the three-dimensional structure of the protein homologous  
20 to SEQ ID NO: 1.

In another embodiment, the invention relates to a computer-readable data storage medium ("CRM") comprising a data storage material encoded with computer readable data, which when used by a computer programmed with instructions for using such data, displays a three-dimensional graphical representation of a molecule  
25 or molecular complex comprising a binding pocket defined by structure coordinates of SEQ ID NO.: 1, or alternatively by structure coordinates of an active site as defined herein, or a homologue of said molecule or molecular complex, wherein said homologue comprises a binding pocket that has a root mean square deviation from the backbone atoms of said amino acids of less than about 1.50Å, or alternatively less  
30 than about 1.00Å. In another embodiment, the aforementioned structure coordinates are those of any one or more of Tables 1-4, or a subset thereof, including the coordinates relating to the active site as defined herein.



The computer may comprise a central processing unit ("CPU"), a working memory, for example, random access memory ("RAM") and/or storage memory in the form of one or more disk drives (e.g., floppy, Zip™, Jazz™), tape drives, CD-ROM drives, DVD drives, and the like, a display terminal such as for example, a cathode ray tube type display, and input and output lines for data transmission, including a keyboard and/or mouse controller. The computer may be a stand-alone, or connected to a network and/or shared server. Data storage materials include, for example, hard drives, floppy, Zip™ and Jazz™ type disks, tapes, CDs, and DVDs.

In another embodiment, the invention relates to a computer readable data storage material encoded with computer readable data comprising structure coordinates of any one or more of Tables 1-4, or alternatively, encoded with computer readable data comprising structure coordinates of the active site of any one or more of Tables 1-4.

In another embodiment, the invention relates to a method for identifying a potential inhibitor of a kinase comprising:

- (a) selecting or designing a potential inhibitor by performing rational drug design with a computer readable data storage material encoded with computer readable data comprising structure coordinates of any one or more of Tables 1-4, wherein said selecting is performed in conjunction with computer modeling;
- (b) contacting the potential inhibitor with a kinase; and
- (c) detecting the ability of the potential inhibitor for inhibiting the kinase.;

In another embodiment, the computer readable data storage material in step (a) is encoded with computer readable data comprising structure coordinates of the active site of any one or more of Tables 1-4.

Table 1 contains the X-ray structure coordinates of an Lck:PP2 complex. Tables 2 and 3 contain the X-ray structure coordinates of an Lck:AMP-PNP complex. Table 4 contains the X-ray structure coordinates of an Lck:staurosporine complex. Table 5 summarizes the diffraction data and refined model of Tables 1-4.

Crystals of the kinase or kinase-ligand complex can be produced or grown by a number of techniques including batch crystallization, vapor diffusion (either by sitting drop or hanging drop), soaking, and by microdialysis. Seeding of the crystals

in some instances is required to obtain X-ray quality crystals. Standard micro and/or macro seeding of crystals may therefore be used. Preferably, the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution greater than 5.0 Angstroms, alternatively greater than 3.0 Angstroms, or alternatively greater than 2.0 Angstroms. Exemplified in the Examples section below is the hanging-drop vapor diffusion procedure.

Once a crystal of the present invention is produced, X-ray diffraction data can be collected. The example below used standard cryogenic conditions for such X-ray diffraction data collection though alternative methods may also be used. For example, diffraction data can be collected by using X-rays produced in a conventional source (such as a sealed tube or rotating anode) or using a synchrotron source. Methods of X-ray data collection include, but are not limited to, precession photography, oscillation photography and diffractometer data collection. Data can be processed using packages including, for example, DENZO and SCALPACK (Z. Otwinowski and W. Minor) and the like.

The three-dimensional structure of the protein or protein-ligand complex constituting the crystal may be determined by conventional means as described herein. Where appropriate, the structure factors from the three-dimensional structure coordinates of a related protein may be utilized to aid the structure determination of the protein-ligand complex. Structure factors are mathematical expressions derived from three-dimensional structure coordinates of a molecule. These mathematical expressions include, for example, amplitude and phase information. The term "structure factors" is known to those of ordinary skill in the art. Alternatively, the three-dimensional structure of the protein-ligand complex may be determined using molecular replacement analysis. This analysis utilizes a known three-dimensional structure as a search model to determine the structure of a closely related protein-ligand complex. The measured X-ray diffraction intensities of the crystal are compared with the computed structure factors of the search model to determine the position and orientation of the protein in the protein-ligand complex crystal. Computer programs that can be used in such analyses include, for example, X-PLOR and AmoRe (J. Navaza, *Acta Crystallographica ASO*, 157-163 (1994)). Once the position and orientation are known, an electron density map may be calculated using

the search model to provide X-ray phases. The electron density can be inspected for structural differences and the search model may be modified to conform to the new structure. Using this approach, one may use the structure of the kinase-ligand complex or complexes described herein to solve other kinase-ligand complex crystal structures, or other kinase crystal structures, particularly where the kinase is homologous to Lck. Computer programs that can be used in such analyses include, for example, QUANTA and the like.

Upon determination of the three-dimensional structure of a crystal of a kinase-ligand complex, a potential inhibitor may be evaluated by any of several methods, alone or in combination. Such evaluation may utilize visual inspection of a three-dimensional representation of the active site, based on the X-ray coordinates of a crystal described herein, on a computer screen. Evaluation, or modeling, may be accomplished through the use of computer modeling techniques, hardware, and software known to those of ordinary skill in the art. This may additionally involve model building, model docking, or other analysis of kinase-ligand interactions using software including, for example, QUANTA or SYBYL, followed by energy minimization and molecular dynamics with standard molecular mechanics forcefields including, for example, CHARMM and AMBER. The three-dimensional structural information of a kinase-ligand complex may also be utilized in conjunction with computer modeling to generate computer models of other kinase protein structures, particularly those with homology to the kinase from which the three-dimensional structural information was determined. Using the structure coordinates described herein, computer models of kinase protein structures of src-family kinases, or of kinases that share sequence homology in the kinase domain or the active site as compared to Lck, may be created using standard methods and techniques known to those of ordinary skill in the art, including software packages described herein.

Once the three-dimensional structure of a crystal comprising a protein-ligand complex formed between a kinase and a standard ligand for that kinase is determined, a potential ligand is examined through the use of computer modeling using a docking program such as FLEX X, DOCK, or AUTODOCK (see, Dunbrack et al., *Folding & Design*, 2:R27-42 (1997)), to identify potential ligands and/or inhibitors for kinases. This procedure can include computer fitting of potential ligands to the ligand binding

site to ascertain how well the shape and the chemical structure of the potential ligand will complement the binding site. [Bugg et al., Scientific American, December:92-98 (1993); West et al., TIPS, 16:67-74 (1995)]. Computer programs can also be employed to estimate the attraction, repulsion, and steric hindrance of the two binding partners (i.e., the ligand-binding site and the potential ligand). Generally the tighter the fit, the lower the steric hindrances, and the greater the attractive forces, the more potent the potential drug since these properties are consistent with a tighter binding constant. Furthermore, the more specificity in the design of a potential drug, the more likely that the drug will not interact as well with other proteins. This will minimize potential side-effects due to unwanted interactions with other proteins.

A variety of methods are available to one skilled in the art for evaluating and virtually screening molecules or chemical fragments appropriate for associating with a protein, particularly a kinase enzyme. Such association may be in a variety of forms including, for example, steric interactions, van der Waals interactions, electrostatic interactions, solvation interactions, charge interactions, covalent bonding interactions, non-covalent bonding interactions (e.g., hydrogen-bonding interactions), entropically or enthalpically favorable interactions, and the like.

Numerous computer programs are available and suitable for rational drug design and the processes of computer modeling, model building, and computationally identifying, selecting and evaluating potential inhibitors in the methods described herein. These include, for example, GRID (available from Oxford University, UK), MCSS (available from Molecular Simulations Inc., Burlington, MA), AUTODOCK (available from Oxford Molecular Group), FLEX X (available from Tripos, St. Louis, MO), DOCK (available from University of California, San Francisco), CAVEAT (available from University of California, Berkeley), HOOK (available from Molecular Simulations Inc., Burlington, MA), and 3D database systems such as MACCS-3D (available from MDL Information Systems, San Leandro, CA), UNITY (available from Tripos, St. Louis, MO), and CATALYST (available from Molecular Simulations Inc., Burlington, MA). Potential inhibitors may also be computationally designed "*de novo*" using such software packages as LUDI (available from Biosym Technologies, San Diego, CA), LEGEND (available from Molecular Simulations Inc., Burlington, MA), and LEAPFROG (Tripos Associates, St. Louis, MO). Compound deformation

energy and electrostatic repulsion, may be evaluated using programs such as GAUSSIAN 92, AMBER, QUANTA/CHARMM, AND INSIGHT II/DISCOVER. These computer evaluation and modeling techniques may be performed on any suitable hardware including for example, workstations available from Silicon  
5 Graphics, Sun Microsystems, and the like. These techniques, methods, hardware and software packages are representative and are not intended to be comprehensive listing. Other modeling techniques known in the art may also be employed in accordance with this invention. See for example, N.C. Cohen, *Molecular Modeling in Drug Design*, Academic Press (1996) (and references therein), and software identified at  
10 internet sites including the CAOS/CAMM Center Cheminformatics Suite at <http://www.caos.kun.nl/>, and the NIH Molecular Modeling Home Page at <http://www.fi.muni.cz/usr/mejzlik/mirrors/molbio.info.nih.gov/modeling/software> list  
/.

A potential inhibitor is selected by performing rational drug design with the  
15 three-dimensional structure (or structures) determined for the crystal described herein, especially in conjunction with computer modeling and methods described above. The potential inhibitor is then obtained from commercial sources or is synthesized from readily available starting materials using standard synthetic techniques and methodologies known to those of ordinary skill in the art. The potential inhibitor is  
20 then assayed to determine its ability to inhibit the target enzyme and/or enzyme pathway as described above.

The potential inhibitor selected or identified by the aforementioned process may be assayed to determine its ability to inhibit the target enzyme and/or enzyme pathway. The assay may be *in vitro* or *in vivo*. Inhibition can be measured by various  
25 methods, including, for example, those methods illustrated in the examples below. The compounds described herein may be used in assays, including radiolabelled, antibody detection and fluorometric, for the isolation, identification, or structural or functional characterization of enzymes, peptides or polypeptides. Such assays include any assay wherein a nucleoside or nucleotide are cofactors or substrates of the peptide  
30 of interest, and particularly any assay involving phosphotransfer in which the substrates and or cofactors are ATP, GTP, Mg, Mn, peptides or polymeric amino acids. The assay may be an enzyme inhibition assay, utilizing a full length or

truncated kinase, said enzyme having sequence homology with that of mammalian origin, including for example, human, murine, rat, and the like. The enzyme is contacted with the potential inhibitor and a measurement of the binding affinity of the potential inhibitor against a standard is determined. Such assays are known to one of  
5 ordinary skill in the art and are exemplified in the examples herein. The assay may also be a cell-based assay. The potential inhibitor is contacted with a cell and a measurement of inhibition of a standard marker produced in the cell is determined. Cells may be either isolated from an animal, including a transformed cultured cell, or may be in a living animal. Such assays are also known to one of ordinary skill in the  
10 art and are exemplified in the examples herein.

When suitable potential ligands are identified as described above, a supplemental crystal can be produced or grown (using techniques described herein) that comprises a protein-ligand complex formed between a kinase, src kinase, lck, or truncated lck and the potential ligand. Preferably, the crystal effectively diffracts X-  
15 rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution greater than 5.0 Angstroms, alternatively greater than 3.0 Angstroms, or alternatively greater than 2.0 Angstroms. The three-dimensional structure of the protein-ligand complex constituting the supplemental crystal may be determined by conventional means such as those described herein.

20 A potential inhibitor is selected by performing rational drug design with the three-dimensional structure (or structures) determined for the supplemental crystal, especially in conjunction with computer modeling described above. The potential inhibitor is then obtained from commercial sources or is synthesized from readily available starting materials using standard synthetic techniques and methodologies  
25 known to those of ordinary skill in the art. The potential inhibitor is then assayed to determine its ability to inhibit the target enzyme and/or enzyme pathway as described above.

For all potential inhibitor assays described herein, further refinements to the structure of the potential inhibitor will generally be necessary and can be made by  
30 successive iterations of any/or all of the steps provided by the inhibitor screening assay.

The inhibitors identified by the methods described herein may also be useful for inhibition of kinase activity of one or more enzymes. Kinases include, for example, protein kinases, lipid kinases (e.g., phosphatidylinositol kinases PI-3, PI-4) and carbohydrate kinases. Kinases may be of prokaryotic, eukaryotic, bacterial, viral, 5 fungal or archaea origin. Specifically, the compounds described herein are useful as inhibitors of tyrosine, serine/threonine or histidine protein kinases. Examples of kinases that are inhibited by the compounds and compositions described herein and against which the methods described herein are useful include, but are not limited to, LCK, IRK (= INSR = Insulin receptor), IGF-1 receptor, SYK, ZAP-70, IRAK1, 10 IRAK2, BLK, BMX, BTK, FRK, FGR, FYN, HCK, ITK, LYN, TEC, TXK, YES, ABL, SRC, EGF-R (= ErbB-1), ErbB-2 (= NEU = HER2), ErbB-3, ErbB-4, FAK, FGF1R (= FGR-1), FGF2R (= FGR-2), IKK-1 (= IKK-ALPHA = CHUK), IKK-2 (= IKK-BETA), MET (= c-MET), NIK, PDGF receptor ALPHA, PDGF receptor BETA, TIE1, TIE2 (= TEK), VEGFR1 (= FLT-1), VEGFR2 (= KDR), FLT-3, FLT-4, KIT, 15 CSK, JAK1, JAK2, JAK3, TYK2, RIP, RIP-2, LOK, TAK1, RET, ALK, MLK3, COT, TRKA, PYK2, EPHB4, RON, GSK3, UL13, ORF47, ATM, CDK (including all subtypes), PKA, PKB (including all PKB subtypes) (=AKT-1, AKT-2, AKT-3), PKC (including all PKC subtypes), and bARK1 (=GRK2) (and other G-protein coupled receptor kinases (GRKs)), and all subtypes or isoforms of these kinases. The 20 inhibitors identified by the methods described herein are suitable for use in the treatment of diseases and disease symptoms that involve one or more of the aforementioned protein kinases. In one embodiment, the inhibitors identified by the methods described herein are particularly suited for inhibition of or treatment of disease or disease symptoms mediated by src-family kinases. In an alternate 25 embodiment, the inhibitors described herein are particularly suited for inhibition of LCK.

The inhibitors described herein are also useful for inhibiting the biological activity of any enzyme comprising greater than 90%, alternatively greater than 85%, or alternatively greater than 70% sequence homology with a kinase sequence, 30 including the kinases mentioned herein. The inhibitors described herein are also useful for inhibiting the biological activity of any enzyme comprising a subsequence, or variant thereof, of any enzyme that comprises greater than 90%, alternatively

greater than 85%, or alternatively greater than 70% sequence homology with a kinase subsequence, including subsequences of the kinases mentioned herein. Such subsequence preferably comprises greater than 90%, alternatively greater than 85%, or alternatively greater than 70% sequence homology with the sequence of an active  
5 site or subdomain of a kinase enzyme. The subsequences, or variants thereof, comprise at least about 250 amino acids, or alternatively at least about 120 amino acids.

The inhibitors described herein are useful for inhibiting the biological activity of any enzyme that binds ATP and thus for treating disease or disease symptoms  
10 mediated by any enzyme that binds ATP. The inhibitors described herein are also useful for inhibiting the biological activity of any enzyme that is involved in phosphotransfer and thus for treating disease or disease symptoms mediated by any enzyme that is involved in phosphotransfer. The inhibitors described herein are also useful for inhibiting the biological activity of a polypeptide or enzyme having  
15 sequence homology with a kinase sequence and thus for treating disease or disease symptoms mediated by such polypeptide or enzyme. Such polypeptides or enzymes may be identified by comparison of their sequence with kinase sequences and kinase catalytic domain sequences. For example, one method of comparison involves the database PROSITE (<http://expasy.hcuge.ch>), containing "signatures" or sequence  
20 patterns (or motifs) or profiles of protein families or domains. Thus, the inhibitors described herein are useful for inhibiting the biological activity of a polypeptide or enzyme comprising a sequence that comprises a "signature" or sequence pattern or profile derived for, and identified in PROSITE as relating to kinases, and for treating disease or disease symptoms mediated by such polypeptide or enzyme. Examples of  
25 such PROSITE motifs or consensus patterns identified as relating to kinases include PS00107, PS00108, PS00109, PS50011, PS00915, and PS00916. The term "kinases" as used in this application, unless expressly stated to the contrary, refers to protein sequences that comprise such signature, motif, or sequence or consensus patterns.

The inhibitors described herein are useful in inhibiting kinase activity. As  
30 such, the compounds, compositions and methods of this invention are useful in treating kinase-mediated disease or disease symptoms in a mammal, particularly a human. Kinase mediated diseases are those wherein a protein kinase is involved in



signaling, mediation, modulation, or regulation of the disease process. Kinase mediated diseases are exemplified by the following disease classes: cancer, autoimmunological, metabolic, inflammatory, infection (bacterial, viral, yeast, fungal, etc.), central nervous system degenerative disease, allergy/asthma, angiogenesis, cardiovascular disease, and the like.

The inhibitors described herein are useful in treating or preventing diseases, including, transplant rejection (e.g., kidney, liver, heart, lung, pancreas (islet cells), bone marrow, cornea, small bowel, skin allografts or xenografts), graft versus host disease, osteoarthritis, rheumatoid arthritis, multiple sclerosis, juvenile diabetes, asthma, inflammatory bowel disease (Crohn's disease, ulcerative colitis), cachexia, septic shock, lupus, diabetes mellitus, myasthenia gravis, psoriasis, dermatitis, eczema, seborrhea, Alzheimer's disease, Parkinson's disease, stem cell protection during chemotherapy, *ex vivo* purging for autologous or allogeneic bone marrow transplantation, cancer (breast, lung, colorectal, ovary, prostate, renal, squamous cell, prostate, etc.), bacterial infections, viral infections, fungal infections and heart disease, including but not limited to, restenosis.

Synthetic chemistry transformations and protecting group methodologies (protection and deprotection) useful in synthesizing the inhibitor compounds described herein are known in the art and include, for example, those such as described in R. Larock, *Comprehensive Organic Transformations*, VCH Publishers (1989); T.W. Greene and P.G.M. Wuts, *Protective Groups in Organic Synthesis*, 2d. Ed., John Wiley and Sons (1991); L. Fieser and M. Fieser, *Fieser and Fieser's Reagents for Organic Synthesis*, John Wiley and Sons (1994); and L. Paquette, ed., *Encyclopedia of Reagents for Organic Synthesis*, John Wiley and Sons (1995).

The inhibitors described herein may contain one or more asymmetric centers and thus occur as racemates and racemic mixtures, single enantiomers, individual diastereomers and diastereomeric mixtures. All such isomeric forms of these compounds are expressly included in the present invention. The inhibitors described herein may also be represented in multiple tautomeric forms, all of which are included herein. The inhibitors may also occur in cis- or trans- or E- or Z- double bond isomeric forms. All such isomeric forms of such inhibitors are expressly included in

the present invention. All crystal forms of the inhibitors described herein are expressly included in the present invention.

All references cited herein, whether in print, electronic, computer readable storage media or other form, are expressly incorporated by reference in their entirety, including but not limited to, abstracts, articles, journals, publications, texts, treatises,  
5 internet web sites, databases, software packages, patents, and patent publications.

In order that the invention described herein may be more readily understood, the following examples are set forth. It should be understood that these examples are for illustrative purposes only and are not to be construed as limiting this invention in  
10 any manner.

## Examples

### Example 1

*Construct design, protein expression and purification.* Full-length LCK cDNA (gift of T. Roberts, DFCI) was used as a template for PCR amplification of a 879 bp fragment encoding amino acid residues 225 to 509 of the Lck catalytic domain. The PCR product was cloned into the Bam HI and Eco RI sites of the  
20 plasmid vector pFastBac1(Gibco/BRL) modified to contain the coding region for GST and a thrombin cleavage site upstream of the multiple cloning site. Recombinant baculovirus was obtained using the Bac-to-Bac expression system (Gibco/BRL). After two rounds of amplification in Sf9 insect cells (*Spodoptera frugiperda*) cultured in Hink's modification of Graces media, the virus was used to infect High Five insect  
25 cells (*trichoplusia ni*) cells grown in Ex-cell 405 media for protein production.

Recombinant GST-Lck (225-509) was purified from baculovirus cells essentially as previously described [40], except that the first step involved fractionating cell lysates on glutathione Sepharose (Pharmacia Biotech). The GST-Lck bound to the resin was eluted with 30 mM glutathione and cleaved overnight at  
30 4°C with the fusion protein at 0.5 mg/ml and  $\alpha$ -thrombin added at a 1:1000 ratio (w/w). A protease inhibitor cocktail was then added and the protein sample was incubated for 30 min at 25°C. The inhibition of thrombin was confirmed in a

spectrophotometric assay as described [57, 58]. The cleaved GST and Lck were separated by anion exchange chromatography essentially as described for the separation of Lck phosphorylation species [40]. The pooled fraction of Lck was then concentrated in a centrprep-10 and size fractionated on a column of Superdex-75.  
5 The monomeric fraction appeared homogeneous by SDS and native polyacrylamide gel electrophoresis.

### Example 2

*Structural determination.* Crystals of the Lck kinase domain in complex with  
10 AMP-PNP/Mg (5mM) were grown from 1.6M ammonium sulfate in 0.1M bisTris (pH6.5) by the hanging drop method. These crystals are isomorphous to the apo Lck [40]. Crystals of apo Lck were obtained under the same condition as described above by microseeding the apo protein sample with the crystals of Lck:AMP-PNP. These crystals were subsequently soaked for three days in a solution containing 1.6M  
15 ammonium sulfate, 0.1M bisTris (pH6.5) and 0.3mM staurosporine. Lck:PP2 crystals are obtained by similar methods.

Crystals of Lck:AMP-PNP and Lck:staurosporine (soaked) were equilibrated against a solution containing 1.6M ammonium sulfate, 0.1M bisTris and 20% ethylene glycol and frozen at 100K for data collection. Diffraction data of the crystals  
20 of Lck:AMP-PNP were collected at the X4A beamline at Brookhaven National Laboratory using an Raxis-IV image plate detector or were collected on an Raxis-II image plate detector mounted on the RU300 generator. Diffraction data for Lck:PP2 was collected on an Raxis-II image plate detector mounted on the RU300 generator. Lck:PP2 crystals were equilibrated as above prior to freezing,. All data were  
25 processed using the HKL software package (Z. Otwinowski).

The structure of the Lck:staurosporine co-complex was solved by molecular replacement using the program AmoRe (J. Navaza). The apo Lck structure was used as a search model. The initial molecular replacement solution was subject to rigid body and positional refinement using XPLOR [59] (Molecular Simulations, Inc.)

30 Bound ligands were identified using the difference fourier method phased by the structure of the apo Lck [40]. Model building of protein and inhibitor into electron density maps were performed using the graphic program Quanta (Molecular

Simulations, Inc.), and the structures were refined using XPLOR [59]. The graphic figures were made by using Grasp [60] and Setor [61].

### Example 3

5        *Kinase activity assays.* Protein kinase activity was measured in two different *in vitro* assays. In the first assay, the kinase of interest was incubated with [<sup>33</sup>P]-ATP in a 96-well plate previously coated with substrate (i.e. poly[Glu, Tyr]4:1) and the kinase activity determined in a Microbeta, Wallac Top-Count (Packard Instruments). In the second assay, protein kinase autophosphorylation was examined. GST fused  
10    Lck proteins consisting of either the kinase domain (Residues 225-509) or nearly full length (Residues 66-509) sequences were incubated in 10 mM Mg<sup>2+</sup>, 25 mM Tris 7.5, 1 mM DTT, 1 μM ATP (10 μCi/ml [<sup>33</sup>P]ATP) for 5 minutes at room temperature with the indicated concentration of compounds. The reaction was stopped by addition of  
15    with 200 μl 10% TCA, 50 μl of scintillation cocktail was added to each well and the plate was read in a microbeta scintillation counter (Wallach).

### Example 4

20        *T-cell activation.* Whole blood was obtained from normal donors and human peripheral blood lymphocytes (hPBL) were isolated by ficol-hypaque density centrifugation. T-cells were then purified from the hPBL by negative selection using an R&D column following the manufacturers directions (R&D Systems, Minneapolis, MN). A 96-well flat-bottomed plate was coated with 10 μg/ml of goat anti-mouse (GAM)-IgG<sub>1</sub> (Caltag, Burlingame, CA) in PBS overnight at 4C. The GAM-coated  
25    plate was flicked out and anti-CD3 mAb (UCHT-1, Coulter/Immunotech, Miami, FL) is added at 0.2 μg/ml in AIMV medium (Gibco, Grand Island, NY) for 3 hr. at 37C. Purified T-cells were pre-incubated at 1 x 10<sup>5</sup>/well in AIM V with or without compound for 30 minutes then transferred to the anti-CD3 capture plate. Finally, anti-CD28 (PharMingen, San Diego, CA) in AIMV (150 ng/ml final) was added to  
30    each well. Cells were incubated for 20 hours at 37C in 5% CO<sub>2</sub> then supernatants were tested by ELISA for cytokine levels (Endogen, Woburn, MA).

### Example 5

*Phosphotyrosine western blotting.* Jurkat (ATCC, Manassas, VA) cells ( $1 \times 10^7$ ) in RPMI-1640 (Gibco, Grand Island, NY) containing 10% FCS (Sigma, St. Louis, MO) were incubated with or without anti-CD3 mAb (UCHT-1, 10  $\mu$ g/ml) for 5 15 minutes on ice. Cells were washed in cold PBS then incubated with or without GAM-IgG<sub>1</sub> (10  $\mu$ g /ml) in RPMI-1640 containing 10% FCS for 15 minutes on ice. Cells were then transferred to 37C° water bath for 1 minute. Stimulation was stopped by the addition of 5 volumes of cold PBS containing 200  $\mu$ M sodium orthovanadate. Cells were spun down and lysed in 150 mM Tris/10 mM HEPES buffer, pH 7.3, 10 containing 1% Triton X-100 and Complete protease inhibitor cocktail (Boehringer Mannheim, Germany) for 30 minutes on ice. Whole cell lysates ( $2 \times 10^6$ /cell equivalents per lane) were separated by 14% reducing SDS-PAGE and transferred to PVDF membrane. Blots were probed with anti-phosphotyrosine (4G10, Upstate Biotechnology, Inc., Saranac Lake, NY) and developed using ECL-plus following the 15 manufacturers directions (Amersham, Arlington Heights, IL).

### Example 6

Kinases suitable for use in the following protocol to determine kinase activity of the compounds described herein include, but are not limited to: Lck, Lyn, Src, Fyn, 20 Syk, Zap-70, Itk, Tec, Btk, EGFR, ErbB2, Kdr, Tek, c-Met, InsR.

Kinases are expressed as either kinase domains or full length constructs fused to glutathione S-transferase (GST) or polyHistidine tagged fusion proteins in either E. coli or Baculovirus-High Five expression systems. They are purified to near homogeneity by affinity chromatography essentially as previously described (Lehr et 25 al., 1996; Gish et al., 1995). In some instances, kinases are co-expressed or mixed with purified or partially purified regulatory polypeptides prior to measurement of activity.

Kinase activity and inhibition are measured essentially by established protocols (Braunwalder et al., 1996). Briefly, The transfer of  $^{33}\text{PO}_4$  from ATP to the 30 synthetic substrates poly(Glu, Tyr) 4:1 or poly(Arg, Ser) 3:1 attached to the bioactive surface of microtiter plates serves as the basis to evaluate enzyme activity. After an incubation period, the amount of phosphate transferred is measured by first washing

the plate with 0.5% phosphoric acid, adding liquid scintillant, and then counting in a liquid scintillation detector. The IC<sub>50</sub> is determined by the concentration of compound that causes a 50% reduction in the amount of <sup>33</sup>P incorporated onto the substrate bound to the plate.

5           Other similar methods whereby phosphate is transferred to peptide or polypeptide substrate containing tyrosine, serine, threonine, or histidine, either alone, in combination, or in combination with other amino acids, in solution or immobilized (i.e., solid phase) are also useful. Alternatively, kinase activity can be measured using antibody-based methods whereby an antibody or polypeptide is used as a reagent to  
10   detect phosphorylated target polypeptide.

Example 6 References:

Braunwalder AF, Yarwood DR, Hall T, Missbach M, Lipson KE, Sills MA. (1996). A solid-phase assay for the determination of protein tyrosine kinase activity of c-src  
15   using scintillating microtitration plates. *Anal. Biochem.* 234(1):23-26.

Gish G, McGlone ML, Pawson T, Adams JA. (1995). Bacterial expression, purification and preliminary kinetic description of the kinase domain of v-fps. *Protein Eng.* 8(6):609-614.

20   Lehr RV, Ma YG, Kratz D, Brake PG, Wang S, Faltynek CR, Wang XM, Stevis PE (1996). Production, purification and characterization of non-myristylated human T-cell protein tyrosine kinase in a baculovirus expression system. *Gene* 169(2):27527-9.

25

Example 7

The cellular activities of the inhibitor compounds described herein may be assessed in a number of assays known to those skilled in the art, some of which are exemplified as described below. Typical sources for cells include, but are not limited  
30   to, human bone marrow or peripheral blood lymphocytes, or their equivalents, or rodent spleen cells. Transformed cell lines that have been reported as cytokine- and growth factor-dependent cells are available from standard cell banks such as The American Type Culture Collection (Bethesda, MD). Cells genetically manipulated to express a particular kinase or kinases are also suitable for use in assaying cellular  
35   activity. These cells are grown in various standard tissue culture media available from suppliers such as GIBCO/BRL (Grand Island, NY) supplemented with fetal bovine

serum. Cellular activity may also be measured using bacterial, yeast, or virally infected mammalian cells. Standard inhibitors of cell activation include mycophenolic acid (SIGMA, St. Louis, MO), staurosporine (Calbiochem, San Diego, CA), wortmannin (Calbiochem), cyclosporine, FK-506, and steroids (e.g., corticosteroids).

5       The compound(s) are tested for activity in cellular assays of T or B cell activation. For example, the receptor-induced production of cytokines and/or cell proliferation is a useful measure. This assay is performed similarly to techniques described in the literature (1,2), and involves antibody-, antigen-, mitogen-, or antigen presenting cell-mediated crosslinking of the T cell or B cell receptor with or without  
10       engagement of co-stimulatory receptors.

      The compound(s) are tested for activity in cellular assays of allergic mediator release. For example, the receptor-induced degranulation in mast cells or basophils leading to histamine release and the production of cytokines is a useful measure. This assay is performed similarly to techniques described in the literature (3), and involves  
15       crosslinking of antigen-specific IgE on cells leading to degranulation and or cytokine production.

      The compound(s) are tested for activity in cellular assays of growth factor effects. For example, growth factor receptor-induced signaling in a cell leading to intracellular signaling events such as kinase autophosphorylation, phosphorylation of  
20       relevant kinase substrates, phosphorylation of MAP kinases, or induction of gene expression. Also, for example, growth factor-induced functional events in cells such as DNA synthesis, proliferation, migration, or apoptosis. These assays are performed similarly to techniques described in the literature (4-7), and involve addition of growth factor to responsive cells followed by monitoring of signaling or functional  
25       events.

      The compound(s) are tested for activity in cellular assays of cytokine activation. For example, cytokine-induced intracellular signaling events and/or cell proliferation and/or cytokine production are a useful measure. This assay is performed similarly to techniques described in the literature (8), and involves addition of  
30       cytokine to responsive cells followed by monitoring intracellular signaling events and/or cell proliferation and/or cytokine production.

## Example 7 References:

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While we have described a number of embodiments of this invention, it is apparent that our basic examples may be altered to provide other embodiments that utilize the products and processes of this invention. Therefore, it will be appreciated that the scope of this invention is to be defined by the claims rather than by the specific embodiments that have been represented by way of example.



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Table 1  
Coordinates of Lck bound with PP2

5	<u>B</u>	Atom				<u>X</u>	<u>Y</u>	<u>Z</u>	<u>Occ</u>
		<u>Type</u>	<u>Res</u>	<u>#</u>					
	ATOM	1	CB	LYS	231	0.991	26.799	89.459	1.00
	35.40								
10	ATOM	2	CG	LYS	231	0.374	26.962	88.107	1.00
	37.62								
	ATOM	3	CD	LYS	231	0.905	25.834	87.245	1.00
	39.89								
15	ATOM	4	CE	LYS	231	0.214	25.740	85.904	1.00
	41.37								
	ATOM	5	NZ	LYS	231	0.933	24.716	85.076	1.00
	41.65								
	ATOM	9	C	LYS	231	1.694	27.685	91.603	1.00
	31.30								
20	ATOM	10	O	LYS	231	2.774	28.259	91.645	1.00
	31.13								
	ATOM	13	N	LYS	231	1.184	29.238	89.851	1.00
	34.51								
25	ATOM	15	CA	LYS	231	0.763	27.931	90.450	1.00
	32.98								
	ATOM	16	N	PRO	232	1.278	26.851	92.579	1.00
	30.24								
	ATOM	17	CD	PRO	232	-0.033	26.192	92.746	1.00
	29.57								
30	ATOM	18	CA	PRO	232	2.148	26.560	93.722	1.00
	26.98								
	ATOM	19	CB	PRO	232	1.277	25.633	94.590	1.00
	26.85								
	ATOM	20	CG	PRO	232	0.321	25.045	93.658	1.00
35	28.72								
	ATOM	21	C	PRO	232	3.410	25.870	93.180	1.00
	24.72								
	ATOM	22	O	PRO	232	3.411	25.249	92.127	1.00
	23.36								
40	ATOM	23	N	TRP	233	4.506	26.024	93.896	1.00
	25.48								
	ATOM	25	CA	TRP	233	5.793	25.473	93.470	1.00
	23.55								
45	ATOM	26	CB	TRP	233	6.878	25.761	94.535	1.00
	23.19								
	ATOM	27	CG	TRP	233	6.731	24.980	95.839	1.00
	22.23								
	ATOM	28	CD2	TRP	233	7.153	23.624	96.113	1.00
	21.73								
50	ATOM	29	CE2	TRP	233	6.845	23.357	97.461	1.00
	22.74								
	ATOM	30	CE3	TRP	233	7.762	22.615	95.347	1.00
	22.69								
	ATOM	31	CD1	TRP	233	6.203	25.451	96.995	1.00
55	20.43								
	ATOM	32	NE1	TRP	233	6.276	24.494	97.972	1.00
	22.28								
	ATOM	34	CZ2	TRP	233	7.113	22.112	98.076	1.00
	22.05								



	ATOM	35	CZ3	TRP	233	8.037	21.372	95.957	1.00
	20.26								
	ATOM	36	CH2	TRP	233	7.709	21.139	97.306	1.00
	21.81								
5	ATOM	37	C	TRP	233	5.775	23.976	93.115	1.00
	24.28								
	ATOM	38	O	TRP	233	6.474	23.542	92.186	1.00
	21.45								
10	ATOM	39	N	TRP	234	4.970	23.184	93.825	1.00
	23.01								
	ATOM	41	CA	TRP	234	4.914	21.748	93.540	1.00
	22.90								
	ATOM	42	CB	TRP	234	4.259	20.990	94.714	1.00
	20.97								
15	ATOM	43	CG	TRP	234	2.862	21.453	95.077	1.00
	19.50								
	ATOM	44	CD2	TRP	234	2.505	22.370	96.124	1.00
	18.76								
	ATOM	45	CE2	TRP	234	1.087	22.439	96.155	1.00
20	18.03								
	ATOM	46	CE3	TRP	234	3.240	23.139	97.028	1.00
	20.40								
	ATOM	47	CD1	TRP	234	1.685	21.028	94.523	1.00
	19.50								
25	ATOM	48	NE1	TRP	234	0.614	21.613	95.176	1.00
	18.89								
	ATOM	50	CZ2	TRP	234	0.395	23.241	97.060	1.00
	19.36								
30	ATOM	51	CZ3	TRP	234	2.545	23.950	97.937	1.00
	21.59								
	ATOM	52	CH2	TRP	234	1.132	23.988	97.942	1.00
	21.04								
	ATOM	53	C	TRP	234	4.257	21.405	92.192	1.00
	23.16								
35	ATOM	54	O	TRP	234	4.442	20.316	91.630	1.00
	21.44								
	ATOM	55	N	GLU	235	3.474	22.340	91.674	1.00
	24.87								
40	ATOM	57	CA	GLU	235	2.809	22.169	90.381	1.00
	27.37								
	ATOM	58	CB	GLU	235	1.348	22.612	90.486	1.00
	29.65								
	ATOM	59	CG	GLU	235	0.498	21.741	91.387	1.00
	31.86								
45	ATOM	60	CD	GLU	235	-0.983	22.049	91.281	1.00
	36.12								
	ATOM	61	OE1	GLU	235	-1.358	23.128	90.777	1.00
	37.74								
	ATOM	62	OE2	GLU	235	-1.783	21.197	91.705	1.00
50	37.52								
	ATOM	63	C	GLU	235	3.502	22.998	89.296	1.00
	28.36								
	ATOM	64	O	GLU	235	3.177	22.923	88.115	1.00
	30.14								
55	ATOM	65	N	ASP	236	4.431	23.833	89.736	1.00
	30.43								
	ATOM	67	CA	ASP	236	5.190	24.741	88.885	1.00
	31.53								

	ATOM 34.01	68	CB	ASP	236	6.014	25.637	89.822	1.00
	ATOM 35.33	69	CG	ASP	236	6.359	26.961	89.231	1.00
5	ATOM 37.56	70	OD1	ASP	236	5.874	27.298	88.124	1.00
	ATOM 36.77	71	OD2	ASP	236	7.123	27.677	89.902	1.00
10	ATOM 30.91	72	C	ASP	236	6.153	24.035	87.922	1.00
	ATOM 31.33	73	O	ASP	236	6.873	23.102	88.283	1.00
	ATOM 29.27	74	N	GLU	237	6.259	24.583	86.723	1.00
15	ATOM 28.93	76	CA	GLU	237	7.179	24.066	85.733	1.00
	ATOM 31.31	77	CB	GLU	237	6.734	24.482	84.324	1.00
20	ATOM 33.53	78	CG	GLU	237	6.005	25.839	84.237	1.00
	ATOM 36.26	79	CD	GLU	237	4.581	25.803	84.834	1.00
	ATOM 40.24	80	OE1	GLU	237	3.821	24.860	84.486	1.00
25	ATOM 35.72	81	OE2	GLU	237	4.233	26.674	85.672	1.00
	ATOM 29.26	82	C	GLU	237	8.603	24.578	85.993	1.00
30	ATOM 30.63	83	O	GLU	237	9.568	24.075	85.418	1.00
	ATOM 26.50	84	N	TRP	238	8.748	25.546	86.896	1.00
	ATOM 24.60	86	CA	TRP	238	10.048	26.122	87.169	1.00
35	ATOM 27.03	87	CB	TRP	238	9.965	27.639	87.065	1.00
	ATOM 28.24	88	CG	TRP	238	9.900	28.103	85.638	1.00
40	ATOM 30.29	89	CD2	TRP	238	8.744	28.547	84.944	1.00
	ATOM 30.52	90	CE2	TRP	238	9.134	28.864	83.621	1.00
	ATOM 29.46	91	CE3	TRP	238	7.405	28.704	85.313	1.00
45	ATOM 29.31	92	CD1	TRP	238	10.928	28.160	84.738	1.00
	ATOM 30.13	93	NE1	TRP	238	10.480	28.615	83.518	1.00
50	ATOM 30.01	95	CZ2	TRP	238	8.254	29.323	82.679	1.00
	ATOM 32.47	96	CZ3	TRP	238	6.532	29.155	84.385	1.00
	ATOM 33.11	97	CH2	TRP	238	6.950	29.465	83.073	1.00
55	ATOM 22.43	98	C	TRP	238	10.802	25.724	88.437	1.00
	ATOM 22.74	99	O	TRP	238	12.026	25.856	88.468	1.00

	ATOM 17.81	100	N	GLU	239	10.100	25.313	89.496	1.00
	ATOM 16.97	102	CA	GLU	239	10.786	24.906	90.714	1.00
5	ATOM 16.07	103	CB	GLU	239	9.840	24.545	91.854	1.00
	ATOM 18.77	104	CG	GLU	239	10.586	24.476	93.186	1.00
10	ATOM 19.99	105	CD	GLU	239	10.861	25.851	93.816	1.00
	ATOM 20.95	106	OE1	GLU	239	10.154	26.835	93.468	1.00
	ATOM 15.13	107	OE2	GLU	239	11.728	25.937	94.716	1.00
15	ATOM 16.51	108	C	GLU	239	11.687	23.726	90.414	1.00
	ATOM 16.73	109	O	GLU	239	11.341	22.831	89.641	1.00
20	ATOM 15.81	110	N	VAL	240	12.826	23.709	91.080	1.00
	ATOM 15.66	112	CA	VAL	240	13.813	22.696	90.842	1.00
	ATOM 18.62	113	CB	VAL	240	14.747	23.268	89.731	1.00
25	ATOM 15.18	114	CG1	VAL	240	16.140	23.706	90.292	1.00
	ATOM 16.45	115	CG2	VAL	240	14.747	22.424	88.517	1.00
30	ATOM 15.04	116	C	VAL	240	14.542	22.479	92.151	1.00
	ATOM 15.18	117	O	VAL	240	14.746	23.427	92.934	1.00
	ATOM 14.96	118	N	PRO	241	14.832	21.202	92.492	1.00
35	ATOM 12.45	119	CD	PRO	241	14.389	19.967	91.794	1.00
	ATOM 14.57	120	CA	PRO	241	15.556	20.883	93.738	1.00
40	ATOM 14.89	121	CB	PRO	241	15.730	19.351	93.637	1.00
	ATOM 13.42	122	CG	PRO	241	14.449	18.932	92.879	1.00
	ATOM 14.29	123	C	PRO	241	16.923	21.561	93.662	1.00
45	ATOM 13.35	124	O	PRO	241	17.539	21.562	92.615	1.00
	ATOM 14.32	125	N	ARG	242	17.388	22.157	94.752	1.00
50	ATOM 16.02	127	CA	ARG	242	18.667	22.826	94.736	1.00
	ATOM 17.39	128	CB	ARG	242	18.911	23.549	96.047	1.00
	ATOM 19.83	129	CG	ARG	242	19.954	24.664	95.915	1.00
55	ATOM 18.48	130	CD	ARG	242	20.484	25.107	97.287	1.00
	ATOM 18.30	131	NE	ARG	242	19.438	25.621	98.178	1.00

5	ATOM 20.27	133	CZ	ARG	242	18.850	26.802	98.030	1.00
	ATOM 19.01	134	NH1	ARG	242	19.188	27.590	97.017	1.00
	ATOM 19.75	137	NH2	ARG	242	17.928	27.199	98.887	1.00
	ATOM 17.15	140	C	ARG	242	19.852	21.889	94.423	1.00
10	ATOM 13.41	141	O	ARG	242	20.885	22.343	93.904	1.00
	ATOM 15.70	142	N	GLU	243	19.663	20.581	94.660	1.00
	ATOM 17.46	144	CA	GLU	243	20.690	19.555	94.391	1.00
	ATOM 21.17	145	CB	GLU	243	20.219	18.157	94.879	1.00
15	ATOM 26.41	146	CG	GLU	243	20.101	18.009	96.375	1.00
	ATOM 29.87	147	CD	GLU	243	18.891	18.731	96.906	1.00
	ATOM 30.02	148	OE1	GLU	243	17.830	18.651	96.261	1.00
	ATOM 33.72	149	OE2	GLU	243	19.008	19.380	97.961	1.00
20	ATOM 15.84	150	C	GLU	243	21.019	19.437	92.896	1.00
	ATOM 13.74	151	O	GLU	243	22.073	18.886	92.509	1.00
	ATOM 13.19	152	N	THR	244	20.105	19.899	92.045	1.00
	ATOM 12.84	154	CA	THR	244	20.340	19.829	90.618	1.00
25	ATOM 12.93	155	CB	THR	244	19.062	20.179	89.836	1.00
	ATOM 15.83	156	OG1	THR	244	18.614	21.497	90.225	1.00
	ATOM 12.75	158	CG2	THR	244	17.960	19.145	90.108	1.00
	ATOM 12.09	159	C	THR	244	21.416	20.810	90.189	1.00
30	ATOM 12.81	160	O	THR	244	21.919	20.756	89.082	1.00
	ATOM 13.36	161	N	LEU	245	21.827	21.686	91.093	1.00
	ATOM 14.88	163	CA	LEU	245	22.766	22.728	90.715	1.00
	ATOM 14.94	164	CB	LEU	245	22.119	24.089	91.047	1.00
35	ATOM 15.32	165	CG	LEU	245	20.787	24.385	90.349	1.00
	ATOM 15.68	166	CD1	LEU	245	20.038	25.475	91.120	1.00
	ATOM 12.08	167	CD2	LEU	245	21.098	24.810	88.914	1.00
	ATOM 15.36	168	C	LEU	245	24.130	22.735	91.350	1.00
40	ATOM 17.11	169	O	LEU	245	24.268	22.590	92.555	1.00

	ATOM 14.82	170	N	LYS	246	25.128	23.086	90.552	1.00
	ATOM 15.04	172	CA	LYS	246	26.475	23.179	91.087	1.00
5	ATOM 15.31	173	CB	LYS	246	27.414	22.108	90.531	1.00
	ATOM 21.90	174	CG	LYS	246	28.807	22.160	91.193	1.00
10	ATOM 27.51	175	CD	LYS	246	29.832	21.342	90.371	1.00
	ATOM 31.22	176	CE	LYS	246	31.226	21.291	91.023	1.00
	ATOM 33.21	177	NZ	LYS	246	32.180	20.493	90.158	1.00
15	ATOM 12.78	181	C	LYS	246	26.984	24.530	90.684	1.00
	ATOM 14.00	182	O	LYS	246	27.078	24.829	89.501	1.00
20	ATOM 11.60	183	N	LEU	247	27.237	25.370	91.675	0.60
	ATOM 10.36	185	CA	LEU	247	27.771	26.724	91.457	0.60
	ATOM 10.23	186	CB	LEU	247	27.335	27.623	92.609	0.60
25	ATOM 12.95	187	CG	LEU	247	25.898	28.184	92.519	0.60
	ATOM 14.45	188	CD1	LEU	247	24.840	27.109	92.272	0.60
30	ATOM 10.02	189	CD2	LEU	247	25.570	28.997	93.772	0.60
	ATOM 10.78	190	C	LEU	247	29.294	26.632	91.316	0.60
	ATOM 9.14	191	O	LEU	247	30.009	26.119	92.179	0.60
35	ATOM 14.86	192	N	VAL	248	29.796	27.083	90.169	1.00
	ATOM 17.81	194	CA	VAL	248	31.219	26.980	89.862	1.00
40	ATOM 17.07	195	CB	VAL	248	31.431	26.331	88.473	1.00
	ATOM 23.15	196	CG1	VAL	248	32.879	26.479	87.998	1.00
	ATOM 17.53	197	CG2	VAL	248	31.075	24.888	88.540	1.00
45	ATOM 19.58	198	C	VAL	248	32.046	28.243	89.913	1.00
	ATOM 21.76	199	O	VAL	248	33.172	28.227	90.405	1.00
50	ATOM 19.48	200	N	GLU	249	31.512	29.350	89.423	1.00
	ATOM 20.59	202	CA	GLU	249	32.321	30.567	89.400	1.00
	ATOM 21.97	203	CB	GLU	249	33.008	30.694	88.031	1.00
55	ATOM 28.98	204	CG	GLU	249	33.795	32.009	87.893	1.00
	ATOM 29.46	205	CD	GLU	249	34.442	32.223	86.528	1.00

5	ATOM 33.62	206	OE1	GLU	249	34.138	31.491	85.563	1.00
	ATOM 31.65	207	OE2	GLU	249	35.240	33.166	86.412	1.00
	ATOM 20.64	208	C	GLU	249	31.461	31.798	89.645	1.00
	ATOM 18.22	209	O	GLU	249	30.462	32.002	88.978	1.00
10	ATOM 21.11	210	N	ARG	250	31.801	32.566	90.673	1.00
	ATOM 20.75	212	CA	ARG	250	31.062	33.781	90.949	1.00
	ATOM 22.14	213	CB	ARG	250	31.368	34.301	92.352	1.00
15	ATOM 25.03	214	CG	ARG	250	30.624	35.594	92.672	1.00
	ATOM 28.48	215	CD	ARG	250	30.841	36.072	94.117	1.00
	ATOM 30.65	216	NE	ARG	250	32.219	35.928	94.541	1.00
20	ATOM 36.29	218	CZ	ARG	250	32.668	36.245	95.748	1.00
	ATOM 38.58	219	NH1	ARG	250	31.833	36.738	96.666	1.00
	ATOM 36.92	222	NH2	ARG	250	33.960	36.072	96.039	1.00
25	ATOM 19.46	225	C	ARG	250	31.497	34.770	89.879	1.00
	ATOM 19.15	226	O	ARG	250	32.685	34.953	89.604	1.00
	ATOM 18.03	227	N	LEU	251	30.521	35.363	89.207	1.00
30	ATOM 17.17	229	CA	LEU	251	30.790	36.308	88.139	1.00
	ATOM 15.71	230	CB	LEU	251	29.872	36.026	86.942	1.00
	ATOM 16.81	231	CG	LEU	251	29.883	34.605	86.399	1.00
35	ATOM 15.28	232	CD1	LEU	251	28.811	34.429	85.350	1.00
	ATOM 14.89	233	CD2	LEU	251	31.259	34.297	85.808	1.00
	ATOM 19.19	234	C	LEU	251	30.544	37.724	88.609	1.00
40	ATOM 21.50	235	O	LEU	251	31.048	38.683	88.020	1.00
	ATOM 18.74	236	N	GLY	252	29.708	37.850	89.633	1.00
	ATOM 19.05	238	CA	GLY	252	29.352	39.152	90.150	1.00
45	ATOM 18.73	239	C	GLY	252	28.758	39.061	91.531	1.00
	ATOM 16.57	240	O	GLY	252	28.194	38.019	91.930	1.00
	ATOM 19.10	241	N	ALA	253	28.899	40.154	92.278	1.00
55	ATOM 19.46	243	CA	ALA	253	28.415	40.215	93.641	1.00

	ATOM	244	CB	ALA	253	29.460	39.647	94.584	1.00
	20.66								
	ATOM	245	C	ALA	253	28.095	41.666	94.010	1.00
	19.86								
5	ATOM	246	O	ALA	253	28.797	42.583	93.648	1.00
	18.61								
	ATOM	247	N	GLY	254	26.978	41.858	94.696	1.00
	19.85								
10	ATOM	249	CA	GLY	254	26.577	43.195	95.080	1.00
	20.71								
	ATOM	250	C	GLY	254	25.766	43.113	96.338	1.00
	20.71								
	ATOM	251	O	GLY	254	25.714	42.062	96.991	1.00
	21.09								
15	ATOM	252	N	GLN	255	25.081	44.211	96.627	1.00
	21.69								
	ATOM	254	CA	GLN	255	24.238	44.399	97.805	1.00
	22.87								
20	ATOM	255	CB	GLN	255	23.678	45.842	97.768	1.00
	24.44								
	ATOM	256	CG	GLN	255	23.066	46.343	99.090	1.00
	27.91								
	ATOM	257	CD	GLN	255	22.530	47.773	98.983	1.00
	28.66								
25	ATOM	258	OE1	GLN	255	21.679	48.167	99.756	1.00
	32.42								
	ATOM	259	NE2	GLN	255	23.013	48.531	98.005	1.00
	28.11								
30	ATOM	262	C	GLN	255	23.070	43.417	97.932	1.00
	22.21								
	ATOM	263	O	GLN	255	22.684	42.998	99.038	1.00
	20.67								
	ATOM	264	N	PHE	256	22.492	43.044	96.798	1.00
	22.10								
35	ATOM	266	CA	PHE	256	21.330	42.141	96.832	1.00
	22.26								
	ATOM	267	CB	PHE	256	20.233	42.692	95.934	1.00
	22.35								
40	ATOM	268	CG	PHE	256	19.919	44.131	96.211	1.00
	22.39								
	ATOM	269	CD1	PHE	256	19.430	44.503	97.450	1.00
	20.34								
	ATOM	270	CD2	PHE	256	20.225	45.119	95.277	1.00
	22.22								
45	ATOM	271	CE1	PHE	256	19.261	45.827	97.774	1.00
	22.81								
	ATOM	272	CE2	PHE	256	20.062	46.462	95.597	1.00
	22.65								
50	ATOM	273	CZ	PHE	256	19.585	46.820	96.841	1.00
	22.73								
	ATOM	274	C	PHE	256	21.586	40.667	96.529	1.00
	21.89								
	ATOM	275	O	PHE	256	20.677	39.852	96.579	1.00
	19.84								
55	ATOM	276	N	GLY	257	22.848	40.312	96.294	1.00
	21.14								
	ATOM	278	CA	GLY	257	23.146	38.924	95.985	1.00
	21.14								

5	ATOM 20.30	279	C	GLY	257	24.351	38.728	95.090	1.00
	ATOM 18.68	280	O	GLY	257	25.188	39.643	94.922	1.00
	ATOM 17.66	281	N	GLU	258	24.404	37.561	94.445	1.00
	ATOM 16.20	283	CA	GLU	258	25.517	37.227	93.589	1.00
10	ATOM 18.61	284	CB	GLU	258	26.463	36.241	94.307	1.00
	ATOM 24.08	285	CG	GLU	258	26.931	36.680	95.701	1.00
	ATOM 29.32	286	CD	GLU	258	27.827	35.638	96.385	1.00
	ATOM 30.55	287	OE1	GLU	258	27.455	34.436	96.441	1.00
15	ATOM 32.64	288	OE2	GLU	258	28.919	36.011	96.858	1.00
	ATOM 15.13	289	C	GLU	258	25.009	36.582	92.317	1.00
	ATOM 13.97	290	O	GLU	258	23.854	36.183	92.224	1.00
	ATOM 11.50	291	N	VAL	259	25.878	36.545	91.322	0.77
20	ATOM 11.87	293	CA	VAL	259	25.565	35.918	90.054	0.77
	ATOM 10.59	294	CB	VAL	259	25.458	36.944	88.918	0.77
	ATOM 11.39	295	CG1	VAL	259	25.195	36.196	87.577	0.77
	ATOM 12.35	296	CG2	VAL	259	24.300	37.950	89.231	0.77
25	ATOM 11.07	297	C	VAL	259	26.721	34.951	89.791	0.77
	ATOM 7.65	298	O	VAL	259	27.878	35.340	89.806	0.77
	ATOM 12.75	299	N	TRP	260	26.374	33.688	89.570	1.00
	ATOM 12.57	301	CA	TRP	260	27.355	32.634	89.339	1.00
30	ATOM 13.64	302	CB	TRP	260	27.223	31.564	90.422	1.00
	ATOM 15.49	303	CG	TRP	260	27.624	31.962	91.839	1.00
	ATOM 16.17	304	CD2	TRP	260	28.768	31.510	92.549	1.00
	ATOM 19.28	305	CE2	TRP	260	28.693	32.051	93.849	1.00
35	ATOM 18.93	306	CE3	TRP	260	29.857	30.699	92.215	1.00
	ATOM 13.42	307	CD1	TRP	260	26.917	32.752	92.710	1.00
	ATOM 16.08	308	NE1	TRP	260	27.547	32.806	93.911	1.00
	ATOM 19.80	310	CZ2	TRP	260	29.664	31.811	94.816	1.00
40	ATOM 21.11	311	CZ3	TRP	260	30.836	30.463	93.179	1.00



5	ATOM 20.39	312	CH2	TRP	260	30.733	31.017	94.463	1.00
	ATOM 14.42	313	C	TRP	260	27.110	31.896	88.057	1.00
	ATOM 12.42	314	O	TRP	260	25.977	31.874	87.544	1.00
	ATOM 12.57	315	N	MET	261	28.187	31.306	87.534	1.00
10	ATOM 14.05	317	CA	MET	261	28.125	30.398	86.383	1.00
	ATOM 14.46	318	CB	MET	261	29.426	30.446	85.540	1.00
	ATOM 17.51	319	CG	MET	261	29.467	29.449	84.368	1.00
15	ATOM 18.15	320	SD	MET	261	29.909	27.732	84.824	1.00
	ATOM 21.26	321	CE	MET	261	31.650	27.952	84.794	1.00
	ATOM 12.89	322	C	MET	261	28.058	29.049	87.114	1.00
20	ATOM 12.76	323	O	MET	261	28.746	28.843	88.098	1.00
	ATOM 12.57	324	N	GLY	262	27.192	28.148	86.669	1.00
	ATOM 12.10	326	CA	GLY	262	27.092	26.863	87.334	1.00
25	ATOM 10.09	327	C	GLY	262	26.605	25.802	86.361	1.00
	ATOM 10.85	328	O	GLY	262	26.539	26.068	85.161	1.00
	ATOM 9.97	329	N	TYR	263	26.312	24.595	86.840	1.00
30	ATOM 8.96	331	CA	TYR	263	25.798	23.571	85.929	1.00
	ATOM 12.15	332	CB	TYR	263	26.803	22.422	85.749	1.00
	ATOM 15.43	333	CG	TYR	263	27.970	22.824	84.895	1.00
35	ATOM 17.03	334	CD1	TYR	263	27.909	22.695	83.507	1.00
	ATOM 19.78	335	CE1	TYR	263	28.929	23.120	82.711	1.00
	ATOM 18.36	336	CD2	TYR	263	29.105	23.381	85.459	1.00
40	ATOM 19.33	337	CE2	TYR	263	30.149	23.816	84.667	1.00
	ATOM 22.04	338	CZ	TYR	263	30.057	23.676	83.295	1.00
	ATOM 22.57	339	OH	TYR	263	31.100	24.070	82.483	1.00
45	ATOM 8.52	341	C	TYR	263	24.518	23.001	86.512	1.00
	ATOM 9.40	342	O	TYR	263	24.410	22.801	87.719	1.00
	ATOM 8.93	343	N	TYR	264	23.567	22.702	85.639	1.00
50	ATOM 10.98	345	CA	TYR	264	22.288	22.121	86.049	1.00

	ATOM 11.56	346	CB	TYR	264	21.113	22.820	85.320	1.00
	ATOM 11.28	347	CG	TYR	264	19.774	22.108	85.499	1.00
5	ATOM 9.42	348	CD1	TYR	264	19.069	22.217	86.688	1.00
	ATOM 15.83	349	CE1	TYR	264	17.861	21.577	86.872	1.00
10	ATOM 14.76	350	CD2	TYR	264	19.244	21.331	84.482	1.00
	ATOM 16.70	351	CE2	TYR	264	18.028	20.658	84.641	1.00
	ATOM 16.43	352	CZ	TYR	264	17.342	20.787	85.851	1.00
15	ATOM 16.99	353	OH	TYR	264	16.194	20.076	86.066	1.00
	ATOM 9.72	355	C	TYR	264	22.362	20.632	85.640	1.00
20	ATOM 8.37	356	O	TYR	264	22.630	20.326	84.523	1.00
	ATOM 12.41	357	N	ASN	265	22.131	19.742	86.583	1.00
	ATOM 15.00	359	CA	ASN	265	22.168	18.281	86.351	1.00
25	ATOM 14.45	360	CB	ASN	265	20.931	17.835	85.542	1.00
	ATOM 16.46	361	CG	ASN	265	19.697	17.631	86.409	1.00
30	ATOM 18.43	362	OD1	ASN	265	19.684	17.960	87.593	1.00
	ATOM 19.57	363	ND2	ASN	265	18.646	17.085	85.811	1.00
	ATOM 13.32	366	C	ASN	265	23.480	17.833	85.671	1.00
35	ATOM 13.22	367	O	ASN	265	23.479	17.112	84.669	1.00
	ATOM 13.42	368	N	GLY	266	24.576	18.441	86.134	1.00
40	ATOM 10.69	370	CA	GLY	266	25.903	18.157	85.627	1.00
	ATOM 10.57	371	C	GLY	266	26.370	18.683	84.291	1.00
	ATOM 13.73	372	O	GLY	266	27.497	19.190	84.188	1.00
45	ATOM 6.58	373	N	HIS	267	25.524	18.672	83.278	0.49
	ATOM 4.52	375	CA	HIS	267	25.959	19.032	81.930	0.49
50	ATOM 2.00	376	CB	HIS	267	25.519	17.906	80.982	0.49
	ATOM 2.01	377	CG	HIS	267	26.142	16.579	81.298	0.49
	ATOM 2.00	378	CD2	HIS	267	27.443	16.220	81.373	0.49
55	ATOM 3.59	379	ND1	HIS	267	25.404	15.465	81.622	0.49
	ATOM 2.00	381	CE1	HIS	267	26.233	14.460	81.887	0.49

	ATOM 4.45	382	NE2	HIS	267	27.465	14.892	81.741	0.49
	ATOM 4.81	384	C	HIS	267	25.565	20.347	81.277	0.49
5	ATOM 2.00	385	O	HIS	267	26.133	20.755	80.290	0.49
	ATOM 8.43	386	N	THR	268	24.595	21.015	81.863	1.00
10	ATOM 9.66	388	CA	THR	268	24.045	22.241	81.271	1.00
	ATOM 9.51	389	CB	THR	268	22.495	22.190	81.312	1.00
	ATOM 11.36	390	OG1	THR	268	22.064	21.009	80.609	1.00
15	ATOM 7.84	392	CG2	THR	268	21.869	23.479	80.588	1.00
	ATOM 10.26	393	C	THR	268	24.508	23.484	81.978	1.00
20	ATOM 8.95	394	O	THR	268	24.201	23.690	83.109	1.00
	ATOM 8.44	395	N	LYS	269	25.226	24.322	81.256	1.00
	ATOM 10.73	397	CA	LYS	269	25.758	25.539	81.820	1.00
25	ATOM 14.43	398	CB	LYS	269	26.793	26.085	80.844	1.00
	ATOM 20.68	399	CG	LYS	269	27.857	26.927	81.456	1.00
30	ATOM 22.81	400	CD	LYS	269	28.940	27.198	80.418	1.00
	ATOM 25.97	401	CE	LYS	269	30.165	27.822	81.080	1.00
	ATOM 28.11	402	NZ	LYS	269	31.365	27.979	80.165	1.00
35	ATOM 9.94	406	C	LYS	269	24.610	26.538	82.010	1.00
	ATOM 9.80	407	O	LYS	269	23.766	26.713	81.133	1.00
40	ATOM 9.86	408	N	VAL	270	24.565	27.161	83.184	1.00
	ATOM 10.05	410	CA	VAL	270	23.523	28.127	83.507	1.00
	ATOM 9.92	411	CB	VAL	270	22.407	27.471	84.453	1.00
45	ATOM 7.56	412	CG1	VAL	270	21.595	26.382	83.716	1.00
	ATOM 7.92	413	CG2	VAL	270	23.040	26.947	85.730	1.00
50	ATOM 8.92	414	C	VAL	270	24.112	29.285	84.304	1.00
	ATOM 6.48	415	O	VAL	270	25.244	29.215	84.820	1.00
	ATOM 9.98	416	N	ALA	271	23.347	30.375	84.386	1.00
55	ATOM 6.96	418	CA	ALA	271	23.721	31.526	85.230	1.00
	ATOM 12.05	419	CB	ALA	271	23.429	32.850	84.490	1.00

	ATOM 8.72	420	C	ALA	271	22.781	31.390	86.436	1.00
	ATOM 8.81	421	O	ALA	271	21.607	31.007	86.300	1.00
5	ATOM 9.04	422	N	VAL	272	23.283	31.634	87.640	1.00
	ATOM 10.61	424	CA	VAL	272	22.452	31.523	88.852	1.00
10	ATOM 12.04	425	CB	VAL	272	22.906	30.305	89.770	1.00
	ATOM 10.75	426	CG1	VAL	272	22.058	30.206	91.013	1.00
	ATOM 8.55	427	CG2	VAL	272	22.791	28.965	88.987	1.00
15	ATOM 13.45	428	C	VAL	272	22.586	32.866	89.624	1.00
	ATOM 14.83	429	O	VAL	272	23.720	33.334	89.901	1.00
20	ATOM 12.70	430	N	LYS	273	21.452	33.535	89.854	1.00
	ATOM 12.28	432	CA	LYS	273	21.409	34.801	90.618	1.00
	ATOM 13.97	433	CB	LYS	273	20.508	35.828	89.921	1.00
25	ATOM 17.88	434	CG	LYS	273	20.492	37.206	90.606	1.00
	ATOM 20.07	435	CD	LYS	273	19.981	38.243	89.611	1.00
30	ATOM 19.77	436	CE	LYS	273	19.348	39.440	90.304	1.00
	ATOM 18.18	437	NZ	LYS	273	18.869	40.401	89.268	1.00
	ATOM 8.80	441	C	LYS	273	20.840	34.426	91.959	1.00
35	ATOM 10.19	442	O	LYS	273	19.733	33.857	92.030	1.00
	ATOM 6.09	443	N	SER	274	21.585	34.687	93.022	0.65
40	ATOM 8.59	445	CA	SER	274	21.164	34.319	94.360	0.65
	ATOM 10.55	446	CB	SER	274	22.258	33.490	95.032	0.65
	ATOM 10.38	447	OG	SER	274	23.470	34.234	95.063	0.65
45	ATOM 10.30	449	C	SER	274	20.891	35.535	95.198	0.65
	ATOM 5.65	450	O	SER	274	21.649	36.495	95.187	0.65
50	ATOM 15.24	451	N	LEU	275	19.804	35.465	95.967	1.00
	ATOM 17.33	453	CA	LEU	275	19.389	36.573	96.821	1.00
	ATOM 17.49	454	CB	LEU	275	17.864	36.490	97.091	1.00
55	ATOM 19.44	455	CG	LEU	275	17.236	37.430	98.139	1.00
	ATOM 18.21	456	CD1	LEU	275	17.369	38.895	97.688	1.00

	ATOM	457	CD2	LEU	275	15.735	37.045	98.373	1.00
	19.11								
	ATOM	458	C	LEU	275	20.118	36.561	98.149	1.00
	19.37								
5	ATOM	459	O	LEU	275	20.134	35.559	98.860	1.00
	21.32								
	ATOM	460	N	LYS	276	20.707	37.699	98.496	1.00
	21.66								
10	ATOM	462	CA	LYS	276	21.371	37.849	99.781	1.00
	23.47								
	ATOM	463	CB	LYS	276	22.256	39.097	99.809	1.00
	22.50								
	ATOM	464	CG	LYS	276	22.803	39.370	101.182	1.00
	25.85								
15	ATOM	465	CD	LYS	276	23.761	40.521	101.196	1.00
	30.61								
	ATOM	466	CE	LYS	276	24.215	40.799	102.616	1.00
	32.42								
20	ATOM	467	NZ	LYS	276	25.396	41.724	102.623	1.00
	36.15								
	ATOM	471	C	LYS	276	20.240	38.032	100.774	1.00
	22.87								
	ATOM	472	O	LYS	276	19.562	39.024	100.744	1.00
	22.78								
25	ATOM	473	N	ALA	277	20.035	37.047	101.637	1.00
	26.43								
	ATOM	475	CA	ALA	277	18.964	37.093	102.631	1.00
	29.92								
30	ATOM	476	CB	ALA	277	19.031	35.875	103.560	1.00
	29.37								
	ATOM	477	C	ALA	277	18.984	38.383	103.449	1.00
	29.68								
	ATOM	478	O	ALA	277	20.035	38.841	103.908	1.00
	32.15								
35	ATOM	479	N	GLY	278	17.802	38.981	103.586	1.00
	29.88								
	ATOM	481	CA	GLY	278	17.646	40.212	104.332	1.00
	27.48								
40	ATOM	482	C	GLY	278	17.983	41.489	103.571	1.00
	27.11								
	ATOM	483	O	GLY	278	17.649	42.563	104.050	1.00
	26.26								
	ATOM	484	N	SER	279	18.621	41.396	102.399	1.00
	24.86								
45	ATOM	486	CA	SER	279	18.972	42.600	101.640	1.00
	22.90								
	ATOM	487	CB	SER	279	20.068	42.286	100.630	1.00
	22.71								
50	ATOM	488	OG	SER	279	19.618	41.387	99.616	1.00
	20.28								
	ATOM	490	C	SER	279	17.784	43.230	100.933	1.00
	23.27								
	ATOM	491	O	SER	279	17.783	44.413	100.562	1.00
	23.91								
55	ATOM	492	N	MET	280	16.762	42.413	100.711	1.00
	21.45								
	ATOM	494	CA	MET	280	15.561	42.865	100.034	1.00
	19.30								

	ATOM	495	CB	MET	280	15.819	43.181	98.549	1.00
	20.90								
	ATOM	496	CG	MET	280	16.054	41.973	97.620	1.00
	19.17								
5	ATOM	497	SD	MET	280	16.469	42.390	95.878	1.00
	21.32								
	ATOM	498	CE	MET	280	14.834	42.654	95.202	1.00
	16.33								
10	ATOM	499	C	MET	280	14.514	41.760	100.192	1.00
	19.63								
	ATOM	500	O	MET	280	14.783	40.649	100.686	1.00
	18.67								
	ATOM	501	N	SER	281	13.290	42.111	99.850	1.00
	16.87								
15	ATOM	503	CA	SER	281	12.181	41.205	99.953	1.00
	17.53								
	ATOM	504	CB	SER	281	10.902	41.995	99.604	1.00
	18.68								
20	ATOM	505	OG	SER	281	9.840	41.144	99.299	1.00
	16.36								
	ATOM	507	C	SER	281	12.304	40.006	99.010	1.00
	13.43								
	ATOM	508	O	SER	281	12.602	40.179	97.814	1.00
	16.07								
25	ATOM	509	N	PRO	282	12.052	38.791	99.518	0.51
	10.91								
	ATOM	510	CD	PRO	282	11.934	38.421	100.939	0.51
	10.92								
30	ATOM	511	CA	PRO	282	12.131	37.601	98.674	0.51
	10.05								
	ATOM	512	CB	PRO	282	11.791	36.460	99.646	0.51
	9.74								
	ATOM	513	CG	PRO	282	12.321	36.934	100.922	0.51
	10.72								
35	ATOM	514	C	PRO	282	11.079	37.742	97.567	0.51
	9.74								
	ATOM	515	O	PRO	282	11.306	37.355	96.424	0.51
	5.34								
40	ATOM	516	N	ASP	283	9.929	38.339	97.913	1.00
	12.36								
	ATOM	518	CA	ASP	283	8.872	38.566	96.909	1.00
	12.64								
	ATOM	519	CB	ASP	283	7.597	39.111	97.536	1.00
	14.44								
45	ATOM	520	CG	ASP	283	6.486	39.284	96.498	1.00
	19.62								
	ATOM	521	OD1	ASP	283	6.159	38.285	95.831	1.00
	20.34								
	ATOM	522	OD2	ASP	283	5.951	40.398	96.294	1.00
50	17.83								
	ATOM	523	C	ASP	283	9.338	39.546	95.839	1.00
	11.41								
	ATOM	524	O	ASP	283	9.038	39.402	94.664	1.00
	10.24								
55	ATOM	525	N	ALA	284	10.071	40.579	96.244	1.00
	11.86								
	ATOM	527	CA	ALA	284	10.583	41.563	95.269	1.00
	11.50								

	ATOM 14.90	528	CB	ALA	284	11.302	42.729	96.023	1.00
	ATOM 9.71	529	C	ALA	284	11.599	40.856	94.365	1.00
5	ATOM 12.77	530	O	ALA	284	11.616	41.001	93.160	1.00
	ATOM 12.36	531	N	PHE	285	12.482	40.081	94.968	1.00
10	ATOM 11.93	533	CA	PHE	285	13.497	39.363	94.170	1.00
	ATOM 12.00	534	CB	PHE	285	14.400	38.560	95.107	1.00
	ATOM 11.48	535	CG	PHE	285	15.470	37.766	94.398	1.00
15	ATOM 11.61	536	CD1	PHE	285	16.658	38.372	94.029	1.00
	ATOM 12.64	537	CD2	PHE	285	15.306	36.366	94.188	1.00
20	ATOM 15.09	538	CE1	PHE	285	17.723	37.603	93.469	1.00
	ATOM 11.94	539	CE2	PHE	285	16.342	35.582	93.634	1.00
	ATOM 13.87	540	CZ	PHE	285	17.550	36.193	93.272	1.00
25	ATOM 12.72	541	C	PHE	285	12.861	38.440	93.113	1.00
	ATOM 13.64	542	O	PHE	285	13.187	38.502	91.937	1.00
30	ATOM 12.47	543	N	LEU	286	11.889	37.631	93.531	1.00
	ATOM 13.16	545	CA	LEU	286	11.239	36.697	92.631	1.00
	ATOM 10.98	546	CB	LEU	286	10.452	35.655	93.439	1.00
35	ATOM 11.81	547	CG	LEU	286	11.406	34.705	94.189	1.00
	ATOM 11.78	548	CD1	LEU	286	10.686	33.906	95.289	1.00
40	ATOM 11.79	549	CD2	LEU	286	12.074	33.779	93.168	1.00
	ATOM 13.30	550	C	LEU	286	10.373	37.335	91.549	1.00
	ATOM 13.69	551	O	LEU	286	10.099	36.721	90.501	1.00
45	ATOM 14.22	552	N	ALA	287	9.980	38.595	91.753	1.00
	ATOM 12.79	554	CA	ALA	287	9.164	39.275	90.744	1.00
50	ATOM 14.01	555	CB	ALA	287	8.747	40.716	91.227	1.00
	ATOM 12.05	556	C	ALA	287	9.877	39.327	89.413	1.00
	ATOM 14.50	557	O	ALA	287	9.263	39.236	88.375	1.00
55	ATOM 13.61	558	N	GLU	288	11.211	39.367	89.437	1.00
	ATOM 12.81	560	CA	GLU	288	11.989	39.383	88.200	1.00

	ATOM 13.21	561	CB	GLU	288	13.486	39.460	88.526	1.00
	ATOM 16.97	562	CG	GLU	288	14.424	39.430	87.310	1.00
5	ATOM 18.73	563	CD	GLU	288	15.909	39.764	87.655	1.00
	ATOM 20.30	564	OE1	GLU	288	16.279	39.835	88.824	1.00
10	ATOM 21.91	565	OE2	GLU	288	16.735	39.934	86.741	1.00
	ATOM 11.20	566	C	GLU	288	11.732	38.075	87.439	1.00
	ATOM 11.74	567	O	GLU	288	11.424	38.063	86.263	1.00
15	ATOM 10.96	568	N	ALA	289	11.813	36.962	88.169	1.00
	ATOM 9.73	570	CA	ALA	289	11.597	35.633	87.566	1.00
20	ATOM 8.45	571	CB	ALA	289	11.872	34.542	88.603	1.00
	ATOM 8.84	572	C	ALA	289	10.166	35.530	87.033	1.00
	ATOM 9.57	573	O	ALA	289	9.934	35.052	85.914	1.00
25	ATOM 10.45	574	N	ASN	290	9.198	35.999	87.827	1.00
	ATOM 14.12	576	CA	ASN	290	7.800	35.953	87.404	1.00
30	ATOM 16.66	577	CB	ASN	290	6.876	36.488	88.520	1.00
	ATOM 21.59	578	CG	ASN	290	6.762	35.513	89.712	1.00
	ATOM 23.55	579	OD1	ASN	290	6.541	35.926	90.856	1.00
35	ATOM 22.69	580	ND2	ASN	290	6.905	34.219	89.440	1.00
	ATOM 14.97	583	C	ASN	290	7.584	36.726	86.085	1.00
40	ATOM 13.37	584	O	ASN	290	6.789	36.320	85.222	1.00
	ATOM 17.47	585	N	LEU	291	8.285	37.854	85.928	1.00
	ATOM 17.29	587	CA	LEU	291	8.199	38.648	84.697	1.00
45	ATOM 20.19	588	CB	LEU	291	9.003	39.971	84.821	1.00
	ATOM 24.74	589	CG	LEU	291	8.472	41.392	85.179	1.00
50	ATOM 22.61	590	CD1	LEU	291	6.997	41.521	84.889	1.00
	ATOM 22.09	591	CD2	LEU	291	8.806	41.810	86.644	1.00
	ATOM 16.73	592	C	LEU	291	8.778	37.817	83.517	1.00
55	ATOM 15.61	593	O	LEU	291	8.221	37.803	82.417	1.00
	ATOM 13.77	594	N	MET	292	9.939	37.179	83.730	1.00



	ATOM 13.57	596	CA	MET	292	10.590	36.381	82.675	1.00
	ATOM 13.10	597	CB	MET	292	11.966	35.896	83.117	1.00
5	ATOM 14.50	598	CG	MET	292	12.909	37.044	83.430	1.00
	ATOM 15.15	599	SD	MET	292	14.439	36.550	84.164	1.00
10	ATOM 9.75	600	CE	MET	292	15.202	35.872	82.775	1.00
	ATOM 14.48	601	C	MET	292	9.714	35.228	82.178	1.00
	ATOM 14.30	602	O	MET	292	9.803	34.854	81.031	1.00
15	ATOM 15.91	603	N	LYS	293	8.866	34.686	83.058	1.00
	ATOM 19.35	605	CA	LYS	293	7.902	33.660	82.670	1.00
20	ATOM 18.02	606	CB	LYS	293	7.013	33.269	83.859	1.00
	ATOM 19.31	607	CG	LYS	293	7.721	32.508	84.966	1.00
	ATOM 21.14	608	CD	LYS	293	6.813	32.324	86.197	1.00
25	ATOM 23.15	609	CE	LYS	293	7.610	31.749	87.383	1.00
	ATOM 23.01	610	NZ	LYS	293	6.770	31.524	88.623	1.00
30	ATOM 20.23	614	C	LYS	293	6.978	34.180	81.547	1.00
	ATOM 22.05	615	O	LYS	293	6.643	33.444	80.647	1.00
	ATOM 22.80	616	N	GLN	294	6.639	35.471	81.571	1.00
35	ATOM 23.80	618	CA	GLN	294	5.734	36.086	80.563	1.00
	ATOM 23.71	619	CB	GLN	294	4.932	37.226	81.188	1.00
40	ATOM 25.12	620	CG	GLN	294	4.115	36.880	82.410	1.00
	ATOM 25.84	621	CD	GLN	294	3.137	35.733	82.183	1.00
	ATOM 27.13	622	OE1	GLN	294	2.564	35.563	81.087	1.00
45	ATOM 25.33	623	NE2	GLN	294	2.908	34.962	83.232	1.00
	ATOM 24.50	626	C	GLN	294	6.413	36.688	79.333	1.00
50	ATOM 24.11	627	O	GLN	294	5.755	37.279	78.443	1.00
	ATOM 21.49	628	N	LEU	295	7.738	36.618	79.306	1.00
	ATOM 19.69	630	CA	LEU	295	8.487	37.197	78.219	1.00
55	ATOM 19.08	631	CB	LEU	295	9.192	38.475	78.711	1.00
	ATOM 18.05	632	CG	LEU	295	8.308	39.673	78.994	1.00

5	ATOM 20.60	633	CD1	LEU	295	9.091	40.766	79.704	1.00
	ATOM 16.99	634	CD2	LEU	295	7.790	40.127	77.657	1.00
	ATOM 18.25	635	C	LEU	295	9.500	36.220	77.709	1.00
	ATOM 19.62	636	O	LEU	295	10.698	36.338	77.975	1.00
10	ATOM 17.39	637	N	GLN	296	9.035	35.260	76.928	1.00
	ATOM 18.14	639	CA	GLN	296	9.951	34.250	76.416	1.00
	ATOM 15.45	640	CB	GLN	296	9.420	32.832	76.700	1.00
15	ATOM 19.02	641	CG	GLN	296	9.288	32.539	78.179	1.00
	ATOM 20.14	642	CD	GLN	296	8.794	31.115	78.413	1.00
20	ATOM 22.06	643	OE1	GLN	296	9.206	30.199	77.725	1.00
	ATOM 20.10	644	NE2	GLN	296	7.912	30.942	79.361	1.00
25	ATOM 15.64	647	C	GLN	296	10.118	34.452	74.943	1.00
	ATOM 15.34	648	O	GLN	296	9.150	34.458	74.215	1.00
	ATOM 14.27	649	N	HIS	297	11.372	34.551	74.509	1.00
30	ATOM 11.92	651	CA	HIS	297	11.688	34.765	73.101	1.00
	ATOM 10.95	652	CB	HIS	297	11.370	36.225	72.753	1.00
	ATOM 10.37	653	CG	HIS	297	11.495	36.546	71.297	1.00
35	ATOM 12.15	654	CD2	HIS	297	10.556	36.624	70.319	1.00
	ATOM 11.35	655	ND1	HIS	297	12.695	36.842	70.695	1.00
40	ATOM 13.18	657	CE1	HIS	297	12.501	37.097	69.409	1.00
	ATOM 11.54	658	NE2	HIS	297	11.204	36.963	69.158	1.00
	ATOM 11.34	660	C	HIS	297	13.173	34.498	72.928	1.00
45	ATOM 9.90	661	O	HIS	297	13.933	34.717	73.884	1.00
	ATOM 11.48	662	N	GLN	298	13.604	34.113	71.716	1.00
50	ATOM 12.13	664	CA	GLN	298	15.036	33.841	71.439	1.00
	ATOM 13.49	665	CB	GLN	298	15.289	33.479	69.963	1.00
	ATOM 15.33	666	CG	GLN	298	14.906	32.112	69.500	1.00
55	ATOM 15.54	667	CD	GLN	298	15.696	30.957	70.148	1.00
	ATOM 16.95	668	OE1	GLN	298	16.995	30.917	70.199	1.00

	ATOM 12.02	669	NE2	GLN	298	14.949	29.994	70.610	1.00
	ATOM 11.32	672	C	GLN	298	15.956	35.039	71.743	1.00
5	ATOM 11.14	673	O	GLN	298	17.119	34.891	72.078	1.00
	ATOM 10.16	674	N	ARG	299	15.412	36.245	71.641	1.00
10	ATOM 9.08	676	CA	ARG	299	16.194	37.454	71.883	1.00
	ATOM 8.03	677	CB	ARG	299	15.738	38.560	70.916	1.00
	ATOM 3.63	678	CG	ARG	299	15.814	38.211	69.431	1.00
15	ATOM 3.23	679	CD	ARG	299	17.162	38.557	68.807	1.00
	ATOM 6.82	680	NE	ARG	299	18.321	37.992	69.520	1.00
20	ATOM 8.67	682	CZ	ARG	299	18.788	36.758	69.370	1.00
	ATOM 8.24	683	NH1	ARG	299	18.174	35.912	68.556	1.00
	ATOM 8.32	686	NH2	ARG	299	19.910	36.390	70.007	1.00
25	ATOM 7.13	689	C	ARG	299	16.181	37.986	73.310	1.00
	ATOM 9.74	690	O	ARG	299	16.643	39.079	73.549	1.00
30	ATOM 6.11	691	N	LEU	300	15.561	37.269	74.242	1.00
	ATOM 6.01	693	CA	LEU	300	15.522	37.665	75.629	1.00
	ATOM 7.06	694	CB	LEU	300	14.069	37.890	76.154	1.00
35	ATOM 7.90	695	CG	LEU	300	13.323	39.211	75.813	1.00
	ATOM 4.75	696	CD1	LEU	300	13.413	39.508	74.322	1.00
40	ATOM 7.42	697	CD2	LEU	300	11.827	39.102	76.265	1.00
	ATOM 8.93	698	C	LEU	300	16.142	36.506	76.406	1.00
	ATOM 6.41	699	O	LEU	300	15.848	35.338	76.102	1.00
45	ATOM 6.55	700	N	VAL	301	16.966	36.841	77.410	1.00
	ATOM 8.81	702	CA	VAL	301	17.619	35.855	78.245	1.00
50	ATOM 8.90	703	CB	VAL	301	18.539	36.531	79.288	1.00
	ATOM 12.65	704	CG1	VAL	301	19.124	35.519	80.295	1.00
	ATOM 9.85	705	CG2	VAL	301	19.711	37.185	78.520	1.00
55	ATOM 9.15	706	C	VAL	301	16.495	35.009	78.820	1.00
	ATOM 8.93	707	O	VAL	301	15.511	35.520	79.376	1.00

	ATOM 8.85	708	N	ARG	302	16.646	33.690	78.681	1.00
	ATOM 10.40	710	CA	ARG	302	15.573	32.768	79.119	1.00
5	ATOM 12.40	711	CB	ARG	302	15.536	31.582	78.143	1.00
	ATOM 23.68	712	CG	ARG	302	14.164	30.941	77.970	1.00
10	ATOM 30.77	713	CD	ARG	302	14.140	29.714	78.754	1.00
	ATOM 38.30	714	NE	ARG	302	13.444	28.625	78.073	1.00
	ATOM 40.51	716	CZ	ARG	302	13.393	27.385	78.542	1.00
15	ATOM 39.82	717	NH1	ARG	302	13.996	27.096	79.696	1.00
	ATOM 41.42	720	NH2	ARG	302	12.752	26.447	77.855	1.00
	ATOM 8.42	723	C	ARG	302	15.580	32.270	80.538	1.00
20	ATOM 7.98	724	O	ARG	302	16.607	31.798	81.060	1.00
	ATOM 5.71	725	N	LEU	303	14.422	32.334	81.200	1.00
25	ATOM 8.28	727	CA	LEU	303	14.349	31.803	82.563	1.00
	ATOM 6.95	728	CB	LEU	303	13.025	32.163	83.194	1.00
	ATOM 8.61	729	CG	LEU	303	12.808	31.608	84.595	1.00
30	ATOM 5.11	730	CD1	LEU	303	13.812	32.220	85.529	1.00
	ATOM 7.06	731	CD2	LEU	303	11.355	31.903	85.056	1.00
35	ATOM 10.39	732	C	LEU	303	14.373	30.254	82.446	1.00
	ATOM 9.86	733	O	LEU	303	13.822	29.694	81.516	1.00
40	ATOM 11.01	734	N	TYR	304	15.121	29.592	83.313	1.00
	ATOM 12.82	736	CA	TYR	304	15.173	28.128	83.288	1.00
	ATOM 13.79	737	CB	TYR	304	16.603	27.634	83.371	1.00
45	ATOM 12.77	738	CG	TYR	304	17.405	27.754	82.136	1.00
	ATOM 10.38	739	CD1	TYR	304	16.859	28.291	80.969	1.00
50	ATOM 12.06	740	CE1	TYR	304	17.585	28.347	79.831	1.00
	ATOM 11.93	741	CD2	TYR	304	18.719	27.284	82.116	1.00
	ATOM 13.56	742	CE2	TYR	304	19.472	27.322	80.975	1.00
55	ATOM 12.06	743	CZ	TYR	304	18.905	27.849	79.818	1.00
	ATOM 11.27	744	OH	TYR	304	19.613	27.789	78.641	1.00

	ATOM	746	C	TYR	304	14.467	27.548	84.510	1.00
	12.51								
	ATOM	747	O	TYR	304	13.698	26.601	84.397	1.00
	13.97								
5	ATOM	748	N	ALA	305	14.756	28.106	85.687	1.00
	10.67								
	ATOM	750	CA	ALA	305	14.185	27.579	86.929	1.00
	11.01								
10	ATOM	751	CB	ALA	305	14.918	26.257	87.300	1.00
	8.23								
	ATOM	752	C	ALA	305	14.335	28.548	88.086	1.00
	9.42								
	ATOM	753	O	ALA	305	14.999	29.576	87.975	1.00
	9.68								
15	ATOM	754	N	VAL	306	13.764	28.160	89.216	0.75
	8.59								
	ATOM	756	CA	VAL	306	13.840	28.902	90.474	0.75
	8.69								
	ATOM	757	CB	VAL	306	12.566	29.770	90.740	0.75
20	9.62								
	ATOM	758	CG1	VAL	306	12.431	30.827	89.666	0.75
	10.69								
	ATOM	759	CG2	VAL	306	11.261	28.883	90.800	0.75
	9.31								
25	ATOM	760	C	VAL	306	13.930	27.920	91.633	0.75
	10.26								
	ATOM	761	O	VAL	306	13.482	26.785	91.510	0.75
	7.84								
	ATOM	762	N	VAL	307	14.608	28.337	92.710	1.00
30	12.30								
	ATOM	764	CA	VAL	307	14.670	27.582	93.960	1.00
	14.51								
	ATOM	765	CB	VAL	307	16.115	27.196	94.422	1.00
	13.59								
35	ATOM	766	CG1	VAL	307	16.019	26.529	95.817	1.00
	14.23								
	ATOM	767	CG2	VAL	307	16.772	26.224	93.434	1.00
	11.32								
	ATOM	768	C	VAL	307	14.092	28.645	94.910	1.00
40	17.91								
	ATOM	769	O	VAL	307	14.711	29.739	95.168	1.00
	15.90								
	ATOM	770	N	THR	308	12.870	28.400	95.364	1.00
	19.17								
45	ATOM	772	CA	THR	308	12.176	29.380	96.205	1.00
	22.29								
	ATOM	773	CB	THR	308	10.645	29.485	95.851	1.00
	22.71								
	ATOM	774	OG1	THR	308	10.057	28.188	95.749	1.00
50	21.78								
	ATOM	776	CG2	THR	308	10.462	30.186	94.518	1.00
	23.24								
	ATOM	777	C	THR	308	12.377	29.339	97.707	1.00
	24.69								
55	ATOM	778	O	THR	308	11.681	30.033	98.452	1.00
	25.07								
	ATOM	779	N	ALA	309	13.304	28.499	98.162	1.00
	26.35								

	ATOM 27.81	781	CA	ALA	309	13.617	28.424	99.580	1.00
	ATOM 29.53	782	CB	ALA	309	13.673	26.977	100.049	1.00
5	ATOM 28.47	783	C	ALA	309	14.978	29.105	99.719	1.00
	ATOM 26.56	784	O	ALA	309	15.822	29.050	98.800	1.00
10	ATOM 28.30	785	N	GLU	310	15.204	29.755	100.862	1.00
	ATOM 28.80	787	CA	GLU	310	16.457	30.481	101.096	1.00
	ATOM 29.80	788	CB	GLU	310	16.308	31.391	102.324	1.00
15	ATOM 33.60	789	CG	GLU	310	15.345	32.549	102.045	1.00
	ATOM 35.54	790	CD	GLU	310	14.915	33.346	103.269	1.00
20	ATOM 37.41	791	OE1	GLU	310	15.289	32.988	104.413	1.00
	ATOM 36.45	792	OE2	GLU	310	14.150	34.315	103.080	1.00
	ATOM 28.31	793	C	GLU	310	17.748	29.655	101.157	1.00
25	ATOM 30.35	794	O	GLU	310	17.810	28.605	101.794	1.00
	ATOM 26.38	795	N	PRO	311	18.811	30.121	100.486	1.00
30	ATOM 26.11	796	CD	PRO	311	20.162	29.534	100.647	1.00
	ATOM 23.53	797	CA	PRO	311	18.853	31.351	99.688	1.00
	ATOM 24.89	798	CB	PRO	311	20.363	31.610	99.503	1.00
35	ATOM 26.08	799	CG	PRO	311	20.967	30.221	99.565	1.00
	ATOM 21.13	800	C	PRO	311	18.154	31.132	98.360	1.00
40	ATOM 18.55	801	O	PRO	311	18.378	30.165	97.673	1.00
	ATOM 19.48	802	N	ILE	312	17.312	32.086	98.003	1.00
	ATOM 16.72	804	CA	ILE	312	16.533	32.024	96.777	1.00
45	ATOM 17.73	805	CB	ILE	312	15.440	33.126	96.851	1.00
	ATOM 15.57	806	CG2	ILE	312	14.608	33.129	95.595	1.00
50	ATOM 18.07	807	CG1	ILE	312	14.590	32.867	98.111	1.00
	ATOM 23.33	808	CD1	ILE	312	13.363	33.699	98.238	1.00
	ATOM 15.13	809	C	ILE	312	17.381	32.167	95.524	1.00
55	ATOM 14.05	810	O	ILE	312	18.290	32.987	95.454	1.00
	ATOM 14.30	811	N	TYR	313	17.132	31.311	94.543	1.00

	ATOM 13.21	813	CA	TYR	313	17.875	31.382	93.278	1.00
	ATOM 12.11	814	CB	TYR	313	18.621	30.069	92.976	1.00
5	ATOM 15.64	815	CG	TYR	313	19.762	29.641	93.897	1.00
	ATOM 13.64	816	CD1	TYR	313	20.381	30.523	94.759	1.00
10	ATOM 16.99	817	CE1	TYR	313	21.466	30.126	95.521	1.00
	ATOM 16.93	818	CD2	TYR	313	20.253	28.340	93.835	1.00
	ATOM 18.03	819	CE2	TYR	313	21.336	27.939	94.591	1.00
15	ATOM 17.94	820	CZ	TYR	313	21.940	28.824	95.421	1.00
	ATOM 19.83	821	OH	TYR	313	23.057	28.416	96.101	1.00
20	ATOM 11.00	823	C	TYR	313	16.957	31.575	92.086	1.00
	ATOM 12.08	824	O	TYR	313	15.887	31.020	92.043	1.00
	ATOM 9.52	825	N	ILE	314	17.475	32.251	91.062	0.82
25	ATOM 8.77	827	CA	ILE	314	16.803	32.420	89.761	0.82
	ATOM 8.15	828	CB	ILE	314	16.520	33.902	89.393	0.82
30	ATOM 6.94	829	CG2	ILE	314	15.923	34.013	87.975	0.82
	ATOM 8.58	830	CG1	ILE	314	15.526	34.505	90.382	0.82
	ATOM 8.14	831	CD1	ILE	314	15.304	36.031	90.182	0.82
35	ATOM 5.81	832	C	ILE	314	17.860	31.869	88.807	0.82
	ATOM 4.52	833	O	ILE	314	19.018	32.299	88.802	0.82
40	ATOM 8.34	834	N	ILE	315	17.485	30.858	88.041	1.00
	ATOM 8.77	836	CA	ILE	315	18.410	30.182	87.127	1.00
	ATOM 12.61	837	CB	ILE	315	18.393	28.646	87.369	1.00
45	ATOM 8.22	838	CG2	ILE	315	19.323	27.932	86.355	1.00
	ATOM 11.62	839	CG1	ILE	315	18.811	28.341	88.832	1.00
50	ATOM 11.79	840	CD1	ILE	315	17.659	28.147	89.775	1.00
	ATOM 8.39	841	C	ILE	315	18.045	30.508	85.707	1.00
	ATOM 6.04	842	O	ILE	315	16.885	30.338	85.318	1.00
55	ATOM 5.83	843	N	THR	316	19.021	30.986	84.913	1.00
	ATOM 8.36	845	CA	THR	316	18.699	31.378	83.547	1.00

	ATOM 9.42	846	CB	THR	316	18.750	32.954	83.344	1.00
	ATOM 8.78	847	OG1	THR	316	20.125	33.390	83.423	1.00
5	ATOM 5.91	849	CG2	THR	316	17.943	33.736	84.402	1.00
	ATOM 8.42	850	C	THR	316	19.723	30.856	82.557	1.00
10	ATOM 8.32	851	O	THR	316	20.764	30.284	82.913	1.00
	ATOM 8.36	852	N	GLU	317	19.404	31.112	81.293	1.00
	ATOM 8.92	854	CA	GLU	317	20.263	30.847	80.150	1.00
15	ATOM 8.49	855	CB	GLU	317	19.585	31.516	78.951	1.00
	ATOM 6.91	856	CG	GLU	317	20.295	31.428	77.609	1.00
20	ATOM 11.13	857	CD	GLU	317	19.390	31.856	76.463	1.00
	ATOM 11.40	858	OE1	GLU	317	18.458	32.641	76.728	1.00
	ATOM 9.16	859	OE2	GLU	317	19.614	31.449	75.287	1.00
25	ATOM 9.37	860	C	GLU	317	21.620	31.563	80.429	1.00
	ATOM 7.89	861	O	GLU	317	21.670	32.702	80.956	1.00
30	ATOM 9.26	862	N	TYR	318	22.717	30.885	80.134	1.00
	ATOM 9.46	864	CA	TYR	318	24.049	31.441	80.377	1.00
	ATOM 10.67	865	CB	TYR	318	25.008	30.340	80.828	1.00
35	ATOM 13.70	866	CG	TYR	318	26.398	30.870	81.120	1.00
	ATOM 13.98	867	CD1	TYR	318	26.616	31.658	82.229	1.00
40	ATOM 18.18	868	CE1	TYR	318	27.864	32.130	82.529	1.00
	ATOM 14.21	869	CD2	TYR	318	27.487	30.564	80.291	1.00
	ATOM 14.28	870	CE2	TYR	318	28.764	31.049	80.592	1.00
45	ATOM 15.79	871	CZ	TYR	318	28.933	31.822	81.710	1.00
	ATOM 19.16	872	OH	TYR	318	30.161	32.311	82.066	1.00
50	ATOM 9.19	874	C	TYR	318	24.561	32.132	79.110	1.00
	ATOM 9.33	875	O	TYR	318	24.480	31.588	78.010	1.00
	ATOM 8.48	876	N	MET	319	24.978	33.390	79.243	1.00
55	ATOM 9.42	878	CA	MET	319	25.453	34.147	78.066	1.00
	ATOM 10.85	879	CB	MET	319	24.787	35.524	78.046	1.00



	ATOM 11.71	880	CG	MET	319	23.237	35.423	77.946	1.00
	ATOM 13.99	881	SD	MET	319	22.750	34.629	76.411	1.00
5	ATOM 8.87	882	CE	MET	319	23.254	35.844	75.227	1.00
	ATOM 9.69	883	C	MET	319	26.968	34.254	78.250	1.00
10	ATOM 7.90	884	O	MET	319	27.462	35.031	79.087	1.00
	ATOM 6.36	885	N	GLU	320	27.684	33.493	77.435	1.00
	ATOM 10.55	887	CA	GLU	320	29.135	33.342	77.540	1.00
15	ATOM 11.97	888	CB	GLU	320	29.642	32.303	76.508	1.00
	ATOM 20.65	889	CG	GLU	320	31.146	31.906	76.652	1.00
	ATOM 24.26	890	CD	GLU	320	31.485	31.222	77.983	1.00
20	ATOM 27.15	891	OE1	GLU	320	31.327	29.988	78.068	1.00
	ATOM 28.40	892	OE2	GLU	320	31.922	31.915	78.944	1.00
25	ATOM 11.16	893	C	GLU	320	30.005	34.588	77.524	1.00
	ATOM 12.37	894	O	GLU	320	31.031	34.639	78.213	1.00
30	ATOM 11.28	895	N	ASN	321	29.628	35.555	76.695	1.00
	ATOM 11.02	897	CA	ASN	321	30.374	36.782	76.561	1.00
	ATOM 12.54	898	CB	ASN	321	30.451	37.230	75.093	1.00
35	ATOM 13.58	899	CG	ASN	321	31.520	36.474	74.337	1.00
	ATOM 12.04	900	OD1	ASN	321	32.638	36.338	74.833	1.00
40	ATOM 11.91	901	ND2	ASN	321	31.171	35.921	73.195	1.00
	ATOM 11.39	904	C	ASN	321	29.917	37.887	77.473	1.00
	ATOM 12.51	905	O	ASN	321	30.356	39.014	77.315	1.00
45	ATOM 8.41	906	N	GLY	322	29.017	37.536	78.403	1.00
	ATOM 6.95	908	CA	GLY	322	28.528	38.421	79.427	1.00
	ATOM 6.87	909	C	GLY	322	27.900	39.733	78.973	1.00
50	ATOM 7.74	910	O	GLY	322	27.255	39.785	77.923	1.00
	ATOM 2.00	911	N	SER	323	28.125	40.794	79.731	0.43
55	ATOM 2.39	913	CA	SER	323	27.539	42.086	79.394	0.43
	ATOM 2.00	914	CB	SER	323	27.636	42.956	80.635	0.43

	ATOM	915	OG	SER	323	27.155	44.230	80.416	0.43
	2.00								
	ATOM	917	C	SER	323	28.122	42.789	78.147	0.43
	4.13								
5	ATOM	918	O	SER	323	29.336	42.891	77.969	0.43
	2.00								
	ATOM	919	N	LEU	324	27.239	43.287	77.279	1.00
	7.40								
10	ATOM	921	CA	LEU	324	27.659	43.959	76.056	1.00
	8.58								
	ATOM	922	CB	LEU	324	26.460	44.460	75.264	1.00
	7.55								
	ATOM	923	CG	LEU	324	26.757	45.294	74.010	1.00
	8.52								
15	ATOM	924	CD1	LEU	324	27.410	44.434	72.917	1.00
	8.10								
	ATOM	925	CD2	LEU	324	25.382	45.839	73.496	1.00
	7.07								
20	ATOM	926	C	LEU	324	28.586	45.151	76.367	1.00
	8.58								
	ATOM	927	O	LEU	324	29.549	45.352	75.682	1.00
	9.01								
	ATOM	928	N	VAL	325	28.264	45.917	77.398	1.00
	9.65								
25	ATOM	930	CA	VAL	325	29.091	47.041	77.763	1.00
	12.45								
	ATOM	931	CB	VAL	325	28.433	47.877	78.896	1.00
	10.82								
30	ATOM	932	CG1	VAL	325	28.708	47.274	80.325	1.00
	10.26								
	ATOM	933	CG2	VAL	325	28.931	49.339	78.773	1.00
	14.55								
	ATOM	934	C	VAL	325	30.535	46.567	78.096	1.00
	14.06								
35	ATOM	935	O	VAL	325	31.517	47.235	77.720	1.00
	15.13								
	ATOM	936	N	ASP	326	30.673	45.387	78.718	1.00
	12.37								
40	ATOM	938	CA	ASP	326	32.016	44.853	79.026	1.00
	11.79								
	ATOM	939	CB	ASP	326	32.000	43.837	80.173	1.00
	12.18								
	ATOM	940	CG	ASP	326	31.535	44.411	81.453	1.00
	15.66								
45	ATOM	941	OD1	ASP	326	31.852	45.571	81.744	1.00
	17.87								
	ATOM	942	OD2	ASP	326	30.858	43.685	82.212	1.00
	15.29								
	ATOM	943	C	ASP	326	32.637	44.163	77.814	1.00
50	9.96								
	ATOM	944	O	ASP	326	33.831	44.319	77.505	1.00
	11.59								
	ATOM	945	N	PHE	327	31.824	43.432	77.071	1.00
	9.51								
55	ATOM	947	CA	PHE	327	32.316	42.701	75.916	1.00
	9.01								
	ATOM	948	CB	PHE	327	31.214	41.835	75.309	1.00
	8.68								

	ATOM 12.74	949	CG	PHE	327	31.612	41.231	73.975	1.00
	ATOM 9.77	950	CD1	PHE	327	32.505	40.144	73.926	1.00
5	ATOM 9.21	951	CD2	PHE	327	31.163	41.782	72.780	1.00
	ATOM 9.36	952	CE1	PHE	327	32.936	39.628	72.731	1.00
10	ATOM 12.46	953	CE2	PHE	327	31.586	41.283	71.557	1.00
	ATOM 13.61	954	CZ	PHE	327	32.500	40.177	71.527	1.00
	ATOM 9.16	955	C	PHE	327	32.926	43.614	74.805	1.00
15	ATOM 6.44	956	O	PHE	327	33.917	43.268	74.158	1.00
	ATOM 3.00	957	N	LEU	328	32.333	44.793	74.602	0.40
20	ATOM 3.56	959	CA	LEU	328	32.806	45.699	73.566	0.40
	ATOM 2.90	960	CB	LEU	328	31.804	46.853	73.418	0.40
	ATOM 2.00	961	CG	LEU	328	30.746	46.915	72.301	0.40
25	ATOM 2.00	962	CD1	LEU	328	30.559	45.669	71.533	0.40
	ATOM 3.15	963	CD2	LEU	328	29.472	47.450	72.887	0.40
30	ATOM 4.10	964	C	LEU	328	34.220	46.262	73.819	0.40
	ATOM 2.00	965	O	LEU	328	34.886	46.785	72.935	0.40
	ATOM 8.38	966	N	LYS	329	34.640	46.172	75.069	1.00
35	ATOM 12.01	968	CA	LYS	329	35.947	46.662	75.537	1.00
	ATOM 11.97	969	CB	LYS	329	35.810	47.192	76.963	1.00
40	ATOM 11.78	970	CG	LYS	329	34.926	48.431	77.072	1.00
	ATOM 9.98	971	CD	LYS	329	34.774	48.868	78.519	1.00
	ATOM 13.45	972	CE	LYS	329	33.652	49.917	78.635	1.00
45	ATOM 15.31	973	NZ	LYS	329	33.460	50.307	80.062	1.00
	ATOM 14.87	977	C	LYS	329	37.049	45.608	75.486	1.00
50	ATOM 16.51	978	O	LYS	329	38.235	45.940	75.621	1.00
	ATOM 13.19	979	N	THR	330	36.670	44.349	75.254	1.00
	ATOM 11.60	981	CA	THR	330	37.649	43.250	75.198	1.00
55	ATOM 7.69	982	CB	THR	330	36.942	41.856	75.342	1.00
	ATOM 5.64	983	OG1	THR	330	36.045	41.654	74.260	1.00

	ATOM	985	CG2	THR	330	36.173	41.737	76.601	1.00
	8.84								
	ATOM	986	C	THR	330	38.311	43.273	73.803	1.00
	12.19								
5	ATOM	987	O	THR	330	37.808	43.897	72.863	1.00
	15.01								
	ATOM	988	N	PRO	331	39.429	42.542	73.628	1.00
	13.69								
10	ATOM	989	CD	PRO	331	40.235	41.842	74.656	1.00
	13.18								
	ATOM	990	CA	PRO	331	40.097	42.512	72.323	1.00
	13.57								
	ATOM	991	CB	PRO	331	41.247	41.522	72.562	1.00
	12.36								
15	ATOM	992	CG	PRO	331	41.598	41.771	73.979	1.00
	12.02								
	ATOM	993	C	PRO	331	39.143	42.046	71.197	1.00
	14.37								
20	ATOM	994	O	PRO	331	39.223	42.517	70.063	1.00
	15.73								
	ATOM	995	N	SER	332	38.238	41.108	71.488	1.00
	13.66								
	ATOM	997	CA	SER	332	37.310	40.655	70.431	1.00
	15.74								
25	ATOM	998	CB	SER	332	36.532	39.391	70.863	1.00
	14.92								
	ATOM	999	OG	SER	332	37.433	38.325	71.143	1.00
	20.31								
30	ATOM	1001	C	SER	332	36.311	41.746	70.053	1.00
	14.88								
	ATOM	1002	O	SER	332	36.038	41.960	68.881	1.00
	17.21								
	ATOM	1003	N	GLY	333	35.726	42.389	71.059	1.00
	14.09								
35	ATOM	1005	CA	GLY	333	34.763	43.457	70.818	1.00
	15.72								
	ATOM	1006	C	GLY	333	35.393	44.613	70.033	1.00
	15.81								
40	ATOM	1007	O	GLY	333	34.794	45.122	69.089	1.00
	15.33								
	ATOM	1008	N	ILE	334	36.608	45.004	70.414	1.00
	16.19								
	ATOM	1010	CA	ILE	334	37.340	46.096	69.746	1.00
	16.93								
45	ATOM	1011	CB	ILE	334	38.718	46.326	70.430	1.00
	18.36								
	ATOM	1012	CG2	ILE	334	39.584	47.319	69.606	1.00
	19.31								
50	ATOM	1013	CG1	ILE	334	38.476	46.832	71.855	1.00
	18.58								
	ATOM	1014	CD1	ILE	334	39.750	46.931	72.714	1.00
	21.36								
	ATOM	1015	C	ILE	334	37.528	45.878	68.259	1.00
	17.57								
55	ATOM	1016	O	ILE	334	37.469	46.798	67.474	1.00
	18.66								
	ATOM	1017	N	LYS	335	37.752	44.640	67.850	1.00
	19.23								

	ATOM	1019	CA	LYS	335	37.936	44.350	66.446	1.00
	19.72								
	ATOM	1020	CB	LYS	335	38.745	43.076	66.305	1.00
	23.00								
5	ATOM	1021	CG	LYS	335	40.107	43.204	66.963	1.00
	27.33								
	ATOM	1022	CD	LYS	335	40.692	41.872	67.270	1.00
	30.63								
10	ATOM	1023	CE	LYS	335	41.873	42.040	68.182	1.00
	31.48								
	ATOM	1024	NZ	LYS	335	42.292	40.723	68.592	1.00
	31.57								
	ATOM	1028	C	LYS	335	36.628	44.242	65.628	1.00
	18.64								
15	ATOM	1029	O	LYS	335	36.655	44.080	64.417	1.00
	16.73								
	ATOM	1030	N	LEU	336	35.480	44.410	66.269	1.00
	16.82								
	ATOM	1032	CA	LEU	336	34.210	44.297	65.520	1.00
20	15.13								
	ATOM	1033	CB	LEU	336	33.015	44.291	66.470	1.00
	15.27								
	ATOM	1034	CG	LEU	336	32.912	43.123	67.484	1.00
	18.77								
25	ATOM	1035	CD1	LEU	336	31.580	43.183	68.225	1.00
	17.54								
	ATOM	1036	CD2	LEU	336	33.070	41.761	66.812	1.00
	13.51								
	ATOM	1037	C	LEU	336	34.045	45.428	64.522	1.00
30	16.15								
	ATOM	1038	O	LEU	336	34.293	46.566	64.858	1.00
	17.28								
	ATOM	1039	N	THR	337	33.595	45.103	63.301	1.00
	17.02								
35	ATOM	1041	CA	THR	337	33.375	46.095	62.260	1.00
	17.40								
	ATOM	1042	CB	THR	337	33.280	45.449	60.901	1.00
	17.62								
	ATOM	1043	OG1	THR	337	32.197	44.481	60.893	1.00
40	19.04								
	ATOM	1045	CG2	THR	337	34.638	44.736	60.559	1.00
	21.95								
	ATOM	1046	C	THR	337	32.056	46.827	62.515	1.00
	16.83								
45	ATOM	1047	O	THR	337	31.185	46.334	63.289	1.00
	15.94								
	ATOM	1048	N	ILE	338	31.873	47.975	61.859	1.00
	14.47								
	ATOM	1050	CA	ILE	338	30.628	48.715	62.042	1.00
50	13.03								
	ATOM	1051	CB	ILE	338	30.579	50.047	61.246	1.00
	12.67								
	ATOM	1052	CG2	ILE	338	30.812	49.779	59.745	1.00
	13.10								
55	ATOM	1053	CG1	ILE	338	29.248	50.761	61.561	1.00
	11.18								
	ATOM	1054	CD1	ILE	338	29.074	51.054	63.101	1.00
	9.52								

	ATOM 11.79	1055	C	ILE	338	29.456	47.820	61.624	1.00
	ATOM 11.62	1056	O	ILE	338	28.400	47.872	62.208	1.00
5	ATOM 11.95	1057	N	ASN	339	29.703	46.940	60.647	1.00
	ATOM 14.07	1059	CA	ASN	339	28.697	46.004	60.140	1.00
10	ATOM 17.39	1060	CB	ASN	339	29.293	45.192	58.963	1.00
	ATOM 24.54	1061	CG	ASN	339	28.391	44.043	58.510	1.00
	ATOM 26.23	1062	OD1	ASN	339	28.660	42.860	58.826	1.00
15	ATOM 23.79	1063	ND2	ASN	339	27.328	44.365	57.761	1.00
	ATOM 12.19	1066	C	ASN	339	28.155	45.087	61.240	1.00
20	ATOM 9.91	1067	O	ASN	339	26.929	44.936	61.424	1.00
	ATOM 10.14	1068	N	LYS	340	29.065	44.515	62.028	1.00
	ATOM 8.13	1070	CA	LYS	340	28.660	43.623	63.090	1.00
25	ATOM 8.27	1071	CB	LYS	340	29.841	42.738	63.522	1.00
	ATOM 5.54	1072	CG	LYS	340	29.559	41.849	64.749	1.00
30	ATOM 7.28	1073	CD	LYS	340	28.492	40.798	64.448	1.00
	ATOM 7.51	1074	CE	LYS	340	28.114	39.995	65.721	1.00
	ATOM 10.96	1075	NZ	LYS	340	27.019	39.000	65.349	1.00
35	ATOM 7.62	1079	C	LYS	340	28.030	44.410	64.260	1.00
	ATOM 7.08	1080	O	LYS	340	27.116	43.947	64.943	1.00
40	ATOM 6.47	1081	N	LEU	341	28.461	45.644	64.477	1.00
	ATOM 5.96	1083	CA	LEU	341	27.845	46.435	65.569	1.00
	ATOM 4.03	1084	CB	LEU	341	28.621	47.727	65.862	1.00
45	ATOM 7.36	1085	CG	LEU	341	30.109	47.507	66.294	1.00
	ATOM 6.06	1086	CD1	LEU	341	30.826	48.855	66.323	1.00
50	ATOM 7.12	1087	CD2	LEU	341	30.217	46.836	67.674	1.00
	ATOM 3.96	1088	C	LEU	341	26.400	46.770	65.202	1.00
	ATOM 6.11	1089	O	LEU	341	25.529	46.844	66.082	1.00
55	ATOM 6.18	1090	N	LEU	342	26.156	47.004	63.920	1.00
	ATOM 7.59	1092	CA	LEU	342	24.815	47.310	63.419	1.00

	ATOM 8.88	1093	CB	LEU	342	24.885	47.755	61.956	1.00
	ATOM 11.62	1094	CG	LEU	342	25.484	49.180	61.797	1.00
5	ATOM 10.17	1095	CD1	LEU	342	25.823	49.430	60.312	1.00
	ATOM 7.90	1096	CD2	LEU	342	24.493	50.268	62.373	1.00
10	ATOM 7.74	1097	C	LEU	342	23.909	46.080	63.537	1.00
	ATOM 8.65	1098	O	LEU	342	22.686	46.172	63.764	1.00
	ATOM 9.65	1099	N	ASP	343	24.505	44.936	63.238	1.00
15	ATOM 8.35	1101	CA	ASP	343	23.823	43.621	63.312	1.00
	ATOM 7.51	1102	CB	ASP	343	24.860	42.510	62.947	1.00
20	ATOM 10.12	1103	CG	ASP	343	24.387	41.116	63.308	1.00
	ATOM 8.76	1104	OD1	ASP	343	23.166	40.929	63.483	1.00
	ATOM 10.74	1105	OD2	ASP	343	25.234	40.206	63.368	1.00
25	ATOM 7.81	1106	C	ASP	343	23.333	43.500	64.763	1.00
	ATOM 8.47	1107	O	ASP	343	22.134	43.420	65.022	1.00
30	ATOM 8.09	1108	N	MET	344	24.259	43.572	65.710	1.00
	ATOM 10.16	1110	CA	MET	344	23.919	43.525	67.133	1.00
	ATOM 10.84	1111	CB	MET	344	25.168	43.775	67.997	1.00
35	ATOM 15.39	1112	CG	MET	344	26.224	42.685	67.796	1.00
	ATOM 20.54	1113	SD	MET	344	27.746	43.042	68.667	1.00
40	ATOM 13.40	1114	CE	MET	344	27.504	42.221	70.052	1.00
	ATOM 8.86	1115	C	MET	344	22.844	44.544	67.503	1.00
	ATOM 7.44	1116	O	MET	344	21.957	44.225	68.265	1.00
45	ATOM 7.26	1117	N	ALA	345	23.006	45.808	67.087	1.00
	ATOM 5.67	1119	CA	ALA	345	21.959	46.828	67.380	1.00
50	ATOM 4.54	1120	CB	ALA	345	22.290	48.136	66.681	1.00
	ATOM 5.23	1121	C	ALA	345	20.590	46.309	66.889	1.00
	ATOM 3.90	1122	O	ALA	345	19.589	46.445	67.587	1.00
55	ATOM 5.10	1123	N	ALA	346	20.545	45.783	65.662	1.00
	ATOM 7.13	1125	CA	ALA	346	19.305	45.238	65.119	1.00

	ATOM 8.22	1126	CB	ALA	346	19.459	44.810	63.656	1.00
	ATOM 7.97	1127	C	ALA	346	18.766	44.079	65.974	1.00
5	ATOM 8.44	1128	O	ALA	346	17.529	43.993	66.187	1.00
	ATOM 8.27	1129	N	GLN	347	19.643	43.170	66.451	1.00
10	ATOM 8.51	1131	CA	GLN	347	19.202	42.062	67.330	1.00
	ATOM 5.95	1132	CB	GLN	347	20.367	41.169	67.763	1.00
	ATOM 6.80	1133	CG	GLN	347	21.081	40.521	66.547	1.00
15	ATOM 5.32	1134	CD	GLN	347	22.118	39.500	66.933	1.00
	ATOM 7.59	1135	OE1	GLN	347	22.064	38.966	68.019	1.00
20	ATOM 8.42	1136	NE2	GLN	347	23.057	39.196	66.016	1.00
	ATOM 8.39	1139	C	GLN	347	18.522	42.623	68.566	1.00
	ATOM 9.27	1140	O	GLN	347	17.477	42.131	69.008	1.00
25	ATOM 5.65	1141	N	ILE	348	19.099	43.676	69.133	1.00
	ATOM 7.21	1143	CA	ILE	348	18.502	44.278	70.327	1.00
30	ATOM 5.99	1144	CB	ILE	348	19.440	45.351	70.966	1.00
	ATOM 6.69	1145	CG2	ILE	348	18.820	45.942	72.262	1.00
	ATOM 9.42	1146	CG1	ILE	348	20.761	44.628	71.411	1.00
35	ATOM 11.33	1147	CD1	ILE	348	21.921	45.569	71.586	1.00
	ATOM 5.07	1148	C	ILE	348	17.131	44.880	70.028	1.00
40	ATOM 4.61	1149	O	ILE	348	16.247	44.767	70.856	1.00
	ATOM 7.16	1150	N	ALA	349	16.994	45.538	68.865	1.00
	ATOM 9.08	1152	CA	ALA	349	15.724	46.206	68.493	1.00
45	ATOM 6.01	1153	CB	ALA	349	15.871	47.041	67.216	1.00
	ATOM 9.02	1154	C	ALA	349	14.687	45.087	68.274	1.00
50	ATOM 4.41	1155	O	ALA	349	13.523	45.231	68.595	1.00
	ATOM 7.05	1156	N	GLU	350	15.179	43.954	67.774	1.00
	ATOM 8.60	1158	CA	GLU	350	14.339	42.778	67.527	1.00
55	ATOM 9.61	1159	CB	GLU	350	15.143	41.692	66.794	1.00
	ATOM 12.76	1160	CG	GLU	350	14.353	40.388	66.563	1.00



5	ATOM	1161	CD	GLU	350	15.117	39.374	65.703	1.00
	14.23								
	ATOM	1162	OE1	GLU	350	16.121	39.721	65.028	1.00
	11.84								
10	ATOM	1163	OE2	GLU	350	14.649	38.234	65.655	1.00
	15.86								
	ATOM	1164	C	GLU	350	13.773	42.270	68.839	1.00
	7.48								
15	ATOM	1165	O	GLU	350	12.564	42.004	68.956	1.00
	8.86								
	ATOM	1166	N	GLY	351	14.616	42.185	69.853	1.00
	5.37								
20	ATOM	1168	CA	GLY	351	14.183	41.757	71.173	1.00
	5.89								
	ATOM	1169	C	GLY	351	13.196	42.777	71.765	1.00
	7.42								
25	ATOM	1170	O	GLY	351	12.149	42.414	72.368	1.00
	6.11								
	ATOM	1171	N	MET	352	13.522	44.055	71.628	1.00
	4.75								
30	ATOM	1173	CA	MET	352	12.617	45.113	72.122	1.00
	6.41								
	ATOM	1174	CB	MET	352	13.287	46.490	72.111	1.00
	5.29								
35	ATOM	1175	CG	MET	352	14.426	46.629	73.178	1.00
	6.68								
	ATOM	1176	SD	MET	352	13.960	46.322	74.854	1.00
	9.97								
40	ATOM	1177	CE	MET	352	12.604	47.517	75.127	1.00
	9.15								
	ATOM	1178	C	MET	352	11.290	45.173	71.332	1.00
	7.01								
45	ATOM	1179	O	MET	352	10.292	45.583	71.906	1.00
	8.77								
	ATOM	1180	N	ALA	353	11.263	44.738	70.064	1.00
	8.07								
50	ATOM	1182	CA	ALA	353	10.020	44.738	69.279	1.00
	5.88								
	ATOM	1183	CB	ALA	353	10.291	44.491	67.828	1.00
	7.39								
55	ATOM	1184	C	ALA	353	9.090	43.646	69.840	1.00
	9.76								
	ATOM	1185	O	ALA	353	7.869	43.788	69.823	1.00
	7.82								
55	ATOM	1186	N	PHE	354	9.669	42.551	70.362	1.00
	9.39								
	ATOM	1188	CA	PHE	354	8.853	41.481	70.978	1.00
	9.75								
55	ATOM	1189	CB	PHE	354	9.693	40.227	71.299	1.00
	8.22								
	ATOM	1190	CG	PHE	354	8.974	39.223	72.218	1.00
	9.88								
55	ATOM	1191	CD1	PHE	354	7.912	38.441	71.738	1.00
	12.19								
	ATOM	1192	CD2	PHE	354	9.311	39.119	73.547	1.00
	10.85								
	ATOM	1193	CE1	PHE	354	7.202	37.566	72.617	1.00
	9.37								

5	ATOM 12.35	1194	CE2	PHE	354	8.605	38.254	74.435	1.00
	ATOM 10.17	1195	CZ	PHE	354	7.558	37.488	73.953	1.00
	ATOM 6.25	1196	C	PHE	354	8.261	42.030	72.284	1.00
	ATOM 7.01	1197	O	PHE	354	7.094	41.874	72.566	1.00
10	ATOM 6.36	1198	N	ILE	355	9.092	42.739	73.058	1.00
	ATOM 8.20	1200	CA	ILE	355	8.659	43.342	74.331	1.00
	ATOM 6.84	1201	CB	ILE	355	9.866	43.958	75.089	1.00
	ATOM 8.30	1202	CG2	ILE	355	9.418	44.825	76.269	1.00
15	ATOM 7.74	1203	CG1	ILE	355	10.754	42.822	75.583	1.00
	ATOM 5.93	1204	CD1	ILE	355	11.983	43.271	76.310	1.00
	ATOM 6.49	1205	C	ILE	355	7.512	44.343	74.094	1.00
	ATOM 6.90	1206	O	ILE	355	6.490	44.314	74.750	1.00
20	ATOM 8.41	1207	N	GLU	356	7.710	45.180	73.091	1.00
	ATOM 8.52	1209	CA	GLU	356	6.764	46.190	72.643	1.00
	ATOM 10.94	1210	CB	GLU	356	7.404	46.906	71.442	1.00
	ATOM 13.83	1211	CG	GLU	356	6.454	47.665	70.479	1.00
25	ATOM 13.44	1212	CD	GLU	356	7.254	48.392	69.370	1.00
	ATOM 14.28	1213	OE1	GLU	356	7.847	49.387	69.756	1.00
	ATOM 15.54	1214	OE2	GLU	356	7.325	47.968	68.147	1.00
	ATOM 9.09	1215	C	GLU	356	5.430	45.503	72.239	1.00
30	ATOM 7.12	1216	O	GLU	356	4.346	45.884	72.696	1.00
	ATOM 2.80	1217	N	GLU	357	5.519	44.442	71.446	0.36
	ATOM 3.40	1219	CA	GLU	357	4.326	43.725	71.021	0.36
	ATOM 2.45	1220	CB	GLU	357	4.695	42.730	69.894	0.36
35	ATOM 4.19	1221	CG	GLU	357	3.553	41.917	69.325	0.36
	ATOM 6.13	1222	CD	GLU	357	3.246	40.699	70.168	0.36
	ATOM 6.48	1223	OE1	GLU	357	4.126	40.269	70.946	0.36
	ATOM 10.01	1224	OE2	GLU	357	2.125	40.154	70.084	0.36
40	ATOM 4.04	1225	C	GLU	357	3.533	43.067	72.169	0.36

	ATOM	1226	O	GLU	357	2.308	43.006	72.126	0.36
	2.00								
	ATOM	1227	N	ARG	358	4.227	42.632	73.225	1.00
	7.81								
5	ATOM	1229	CA	ARG	358	3.576	41.991	74.384	1.00
	9.23								
	ATOM	1230	CB	ARG	358	4.553	41.053	75.146	1.00
	10.13								
10	ATOM	1231	CG	ARG	358	5.072	39.858	74.336	1.00
	12.15								
	ATOM	1232	CD	ARG	358	3.926	39.058	73.620	1.00
	17.62								
	ATOM	1233	NE	ARG	358	2.936	38.578	74.565	1.00
	20.90								
15	ATOM	1235	CZ	ARG	358	1.667	38.272	74.262	1.00
	23.73								
	ATOM	1236	NH1	ARG	358	1.205	38.382	73.027	1.00
	22.10								
	ATOM	1239	NH2	ARG	358	0.849	37.875	75.216	1.00
20	23.38								
	ATOM	1242	C	ARG	358	2.981	42.972	75.372	1.00
	8.80								
	ATOM	1243	O	ARG	358	2.491	42.582	76.428	1.00
	8.51								
25	ATOM	1244	N	ASN	359	3.069	44.265	75.044	1.00
	11.15								
	ATOM	1246	CA	ASN	359	2.553	45.318	75.904	1.00
	11.08								
	ATOM	1247	CB	ASN	359	1.087	45.040	76.266	1.00
30	12.23								
	ATOM	1248	CG	ASN	359	0.166	45.474	75.167	1.00
	13.91								
	ATOM	1249	OD1	ASN	359	0.623	45.997	74.195	1.00
	15.68								
35	ATOM	1250	ND2	ASN	359	-1.155	45.286	75.340	1.00
	15.64								
	ATOM	1253	C	ASN	359	3.386	45.571	77.130	1.00
	11.57								
	ATOM	1254	O	ASN	359	2.889	46.060	78.149	1.00
40	9.73								
	ATOM	1255	N	TYR	360	4.671	45.185	77.063	1.00
	9.79								
	ATOM	1257	CA	TYR	360	5.546	45.422	78.204	1.00
	9.21								
45	ATOM	1258	CB	TYR	360	6.419	44.185	78.492	1.00
	10.72								
	ATOM	1259	CG	TYR	360	5.739	43.135	79.337	1.00
	12.72								
	ATOM	1260	CD1	TYR	360	6.013	43.026	80.680	1.00
50	14.34								
	ATOM	1261	CE1	TYR	360	5.384	42.030	81.474	1.00
	16.48								
	ATOM	1262	CD2	TYR	360	4.827	42.262	78.776	1.00
	14.33								
55	ATOM	1263	CE2	TYR	360	4.201	41.275	79.548	1.00
	16.68								
	ATOM	1264	CZ	TYR	360	4.485	41.174	80.888	1.00
	15.37								

	ATOM	1265	OH	TYR	360	3.883	40.198	81.637	1.00
	18.48								
	ATOM	1267	C	TYR	360	6.497	46.577	77.919	1.00
	7.60								
5	ATOM	1268	O	TYR	360	6.607	47.058	76.807	1.00
	7.26								
	ATOM	1269	N	ILE	361	7.168	47.026	78.969	1.00
	9.03								
10	ATOM	1271	CA	ILE	361	8.203	48.037	78.812	1.00
	9.74								
	ATOM	1272	CB	ILE	361	7.832	49.459	79.382	1.00
	9.50								
	ATOM	1273	CG2	ILE	361	6.744	50.166	78.488	1.00
	11.71								
15	ATOM	1274	CG1	ILE	361	7.386	49.365	80.828	1.00
	12.15								
	ATOM	1275	CD1	ILE	361	6.910	50.681	81.374	1.00
	15.27								
	ATOM	1276	C	ILE	361	9.331	47.424	79.625	1.00
	8.68								
20	ATOM	1277	O	ILE	361	9.099	46.637	80.511	1.00
	10.97								
	ATOM	1278	N	HIS	362	10.543	47.913	79.424	1.00
	8.96								
25	ATOM	1280	CA	HIS	362	11.694	47.388	80.151	1.00
	7.95								
	ATOM	1281	CB	HIS	362	12.803	47.084	79.099	1.00
	8.38								
30	ATOM	1282	CG	HIS	362	14.005	46.405	79.671	1.00
	9.73								
	ATOM	1283	CD2	HIS	362	14.377	45.108	79.655	1.00
	7.39								
	ATOM	1284	ND1	HIS	362	14.963	47.070	80.419	1.00
	6.36								
35	ATOM	1286	CE1	HIS	362	15.874	46.209	80.825	1.00
	9.86								
	ATOM	1287	NE2	HIS	362	15.536	45.003	80.378	1.00
	10.13								
40	ATOM	1289	C	HIS	362	12.156	48.394	81.208	1.00
	7.43								
	ATOM	1290	O	HIS	362	12.404	48.038	82.372	1.00
	7.91								
	ATOM	1291	N	ARG	363	12.324	49.657	80.794	1.00
	8.44								
45	ATOM	1293	CA	ARG	363	12.763	50.776	81.671	1.00
	8.08								
	ATOM	1294	CB	ARG	363	11.876	50.937	82.919	1.00
	9.73								
	ATOM	1295	CG	ARG	363	10.387	51.082	82.599	1.00
	13.47								
50	ATOM	1296	CD	ARG	363	9.586	51.484	83.839	1.00
	13.85								
	ATOM	1297	NE	ARG	363	9.685	50.538	84.930	1.00
	13.20								
55	ATOM	1299	CZ	ARG	363	9.722	50.888	86.212	1.00
	15.35								
	ATOM	1300	NH1	ARG	363	9.674	52.171	86.564	1.00
	14.95								

	ATOM	1303	NH2	ARG	363	9.738	49.956	87.151	1.00
	14.46								
	ATOM	1306	C	ARG	363	14.223	50.794	82.112	1.00
	9.76								
5	ATOM	1307	O	ARG	363	14.650	51.732	82.791	1.00
	9.55								
	ATOM	1308	N	ASP	364	15.026	49.830	81.665	1.00
	9.49								
10	ATOM	1310	CA	ASP	364	16.451	49.811	82.066	1.00
	10.04								
	ATOM	1311	CB	ASP	364	16.639	48.836	83.240	1.00
	9.98								
	ATOM	1312	CG	ASP	364	17.888	49.148	84.107	1.00
	14.26								
15	ATOM	1313	OD1	ASP	364	18.594	50.156	83.889	1.00
	14.89								
	ATOM	1314	OD2	ASP	364	18.129	48.394	85.062	1.00
	13.47								
20	ATOM	1315	C	ASP	364	17.262	49.368	80.858	1.00
	9.74								
	ATOM	1316	O	ASP	364	18.196	48.554	80.943	1.00
	8.70								
	ATOM	1317	N	LEU	365	16.825	49.827	79.689	1.00
	7.97								
25	ATOM	1319	CA	LEU	365	17.483	49.485	78.455	1.00
	8.00								
	ATOM	1320	CB	LEU	365	16.568	49.811	77.255	1.00
	7.28								
30	ATOM	1321	CG	LEU	365	17.078	49.446	75.865	1.00
	8.56								
	ATOM	1322	CD1	LEU	365	17.582	47.986	75.822	1.00
	11.42								
	ATOM	1323	CD2	LEU	365	15.960	49.617	74.849	1.00
	11.34								
35	ATOM	1324	C	LEU	365	18.818	50.270	78.340	1.00
	10.93								
	ATOM	1325	O	LEU	365	18.840	51.495	78.137	1.00
	13.74								
40	ATOM	1326	N	ARG	366	19.924	49.544	78.418	1.00
	8.54								
	ATOM	1328	CA	ARG	366	21.264	50.124	78.320	1.00
	10.81								
	ATOM	1329	CB	ARG	366	21.658	50.813	79.638	1.00
	10.58								
45	ATOM	1330	CG	ARG	366	21.516	49.930	80.844	1.00
	13.47								
	ATOM	1331	CD	ARG	366	21.725	50.740	82.138	1.00
	18.51								
50	ATOM	1332	NE	ARG	366	23.068	51.312	82.233	1.00
	18.31								
	ATOM	1334	CZ	ARG	366	23.459	52.090	83.234	1.00
	20.91								
	ATOM	1335	NH1	ARG	366	22.610	52.392	84.208	1.00
	21.08								
55	ATOM	1338	NH2	ARG	366	24.696	52.554	83.279	1.00
	21.60								
	ATOM	1341	C	ARG	366	22.190	48.951	78.021	1.00
	11.69								

	ATOM 6.35	1342	O	ARG	366	21.838	47.814	78.289	1.00
	ATOM 9.93	1343	N	ALA	367	23.355	49.245	77.439	1.00
5	ATOM 9.46	1345	CA	ALA	367	24.324	48.205	77.065	1.00
	ATOM 8.97	1346	CB	ALA	367	25.569	48.855	76.478	1.00
10	ATOM 9.81	1347	C	ALA	367	24.707	47.242	78.203	1.00
	ATOM 10.18	1348	O	ALA	367	25.001	46.038	77.968	1.00
	ATOM 7.59	1349	N	ALA	368	24.676	47.737	79.435	1.00
15	ATOM 9.89	1351	CA	ALA	368	24.992	46.897	80.570	1.00
	ATOM 8.37	1352	CB	ALA	368	24.928	47.694	81.854	1.00
20	ATOM 11.64	1353	C	ALA	368	23.979	45.752	80.670	1.00
	ATOM 8.73	1354	O	ALA	368	24.293	44.629	81.180	1.00
	ATOM 7.92	1355	N	ASN	369	22.771	46.039	80.198	1.00
25	ATOM 9.98	1357	CA	ASN	369	21.687	45.091	80.307	1.00
	ATOM 7.16	1358	CB	ASN	369	20.453	45.804	80.894	1.00
30	ATOM 9.70	1359	CG	ASN	369	20.658	46.204	82.338	1.00
	ATOM 9.63	1360	OD1	ASN	369	21.472	45.576	83.079	1.00
	ATOM 7.25	1361	ND2	ASN	369	19.954	47.251	82.775	1.00
35	ATOM 8.69	1364	C	ASN	369	21.381	44.285	79.055	1.00
	ATOM 10.46	1365	O	ASN	369	20.265	43.723	78.901	1.00
40	ATOM 7.57	1366	N	ILE	370	22.374	44.223	78.162	1.00
	ATOM 6.61	1368	CA	ILE	370	22.296	43.411	76.948	1.00
	ATOM 4.56	1369	CB	ILE	370	22.648	44.186	75.646	1.00
45	ATOM 2.00	1370	CG2	ILE	370	22.640	43.224	74.430	1.00
	ATOM 3.78	1371	CG1	ILE	370	21.621	45.314	75.369	1.00
50	ATOM 5.14	1372	CD1	ILE	370	20.045	44.954	75.518	1.00
	ATOM 9.06	1373	C	ILE	370	23.388	42.327	77.185	1.00
	ATOM 7.80	1374	O	ILE	370	24.530	42.660	77.608	1.00
55	ATOM 8.95	1375	N	LEU	371	23.043	41.047	77.024	1.00
	ATOM 7.58	1377	CA	LEU	371	24.063	39.964	77.236	1.00

5	ATOM 5.07	1378	CB	LEU	371	23.569	38.835	78.156	1.00
	ATOM 6.83	1379	CG	LEU	371	23.229	39.260	79.587	1.00
	ATOM 9.45	1380	CD1	LEU	371	22.753	38.058	80.450	1.00
	ATOM 8.95	1381	CD2	LEU	371	24.465	40.010	80.243	1.00
10	ATOM 7.66	1382	C	LEU	371	24.470	39.428	75.882	1.00
	ATOM 8.35	1383	O	LEU	371	23.703	39.510	74.940	1.00
	ATOM 7.21	1384	N	VAL	372	25.717	38.957	75.780	1.00
15	ATOM 9.26	1386	CA	VAL	372	26.263	38.476	74.528	1.00
	ATOM 10.89	1387	CB	VAL	372	27.536	39.268	74.150	1.00
20	ATOM 8.47	1388	CG1	VAL	372	27.996	38.831	72.754	1.00
	ATOM 5.59	1389	CG2	VAL	372	27.271	40.866	74.213	1.00
	ATOM 7.83	1390	C	VAL	372	26.594	36.970	74.660	1.00
25	ATOM 8.91	1391	O	VAL	372	27.185	36.548	75.643	1.00
	ATOM 7.24	1392	N	SER	373	26.205	36.218	73.637	1.00
30	ATOM 9.76	1394	CA	SER	373	26.384	34.760	73.579	1.00
	ATOM 5.50	1395	CB	SER	373	25.342	34.107	72.660	1.00
	ATOM 8.32	1396	OG	SER	373	25.745	34.322	71.320	1.00
35	ATOM 9.94	1398	C	SER	373	27.744	34.446	72.996	1.00
	ATOM 7.48	1399	O	SER	373	28.465	35.340	72.475	1.00
40	ATOM 10.41	1400	N	ASP	374	28.094	33.165	73.062	1.00
	ATOM 12.58	1402	CA	ASP	374	29.371	32.686	72.546	1.00
	ATOM 16.92	1403	CB	ASP	374	29.578	31.214	72.933	1.00
45	ATOM 21.38	1404	CG	ASP	374	28.619	30.307	72.212	1.00
	ATOM 22.32	1405	OD1	ASP	374	27.403	30.535	72.324	1.00
50	ATOM 27.84	1406	OD2	ASP	374	29.071	29.434	71.444	1.00
	ATOM 14.92	1407	C	ASP	374	29.397	32.866	71.016	1.00
	ATOM 13.69	1408	O	ASP	374	30.467	32.919	70.405	1.00
55	ATOM 12.20	1409	N	THR	375	28.229	32.954	70.365	1.00
	ATOM 11.93	1411	CA	THR	375	28.238	33.202	68.910	1.00

5	ATOM 12.01	1412	CB	THR	375	27.130	32.433	68.162	1.00
	ATOM 11.68	1413	OG1	THR	375	25.856	32.721	68.763	1.00
	ATOM 13.26	1415	CG2	THR	375	27.397	30.929	68.211	1.00
	ATOM 11.66	1416	C	THR	375	28.084	34.695	68.569	1.00
	ATOM 12.15	1417	O	THR	375	27.801	35.064	67.430	1.00
10	ATOM 11.08	1418	N	LEU	376	28.233	35.560	69.565	1.00
	ATOM 11.90	1420	CA	LEU	376	28.072	37.019	69.352	1.00
	ATOM 11.87	1421	CB	LEU	376	29.142	37.609	68.399	1.00
15	ATOM 14.72	1422	CG	LEU	376	30.631	37.276	68.729	1.00
	ATOM 14.52	1423	CD1	LEU	376	31.563	38.234	67.934	1.00
	ATOM 11.76	1424	CD2	LEU	376	30.918	37.377	70.198	1.00
20	ATOM 11.62	1425	C	LEU	376	26.650	37.416	68.889	1.00
	ATOM 12.23	1426	O	LEU	376	26.465	38.175	67.929	1.00
	ATOM 8.91	1427	N	SER	377	25.653	36.778	69.498	1.00
25	ATOM 8.75	1429	CA	SER	377	24.281	37.152	69.246	1.00
	ATOM 6.43	1430	CB	SER	377	23.395	35.931	68.944	1.00
	ATOM 7.78	1431	OG	SER	377	23.392	35.061	70.052	1.00
30	ATOM 8.80	1433	C	SER	377	23.949	37.847	70.595	1.00
	ATOM 7.17	1434	O	SER	377	24.573	37.565	71.663	1.00
	ATOM 8.01	1435	N	CYS	378	22.997	38.780	70.553	1.00
35	ATOM 8.87	1437	CA	CYS	378	22.639	39.570	71.724	1.00
	ATOM 11.38	1438	CB	CYS	378	22.712	41.064	71.359	1.00
	ATOM 14.14	1439	SG	CYS	378	24.361	41.659	70.914	1.00
40	ATOM 8.65	1440	C	CYS	378	21.227	39.276	72.218	1.00
	ATOM 10.46	1441	O	CYS	378	20.335	39.062	71.414	1.00
	ATOM 7.74	1442	N	LYS	379	21.057	39.286	73.537	1.00
45	ATOM 9.78	1444	CA	LYS	379	19.748	39.098	74.188	1.00
	ATOM 5.83	1445	CB	LYS	379	19.635	37.717	74.845	1.00
	ATOM 7.52	1446	CG	LYS	379	19.907	36.610	73.796	1.00



	ATOM	1447	CD	LYS	379	19.441	35.258	74.203	1.00
	5.35								
	ATOM	1448	CE	LYS	379	19.825	34.309	73.066	1.00
	8.53								
5	ATOM	1449	NZ	LYS	379	19.129	33.014	73.109	1.00
	7.32								
	ATOM	1453	C	LYS	379	19.470	40.162	75.244	1.00
	8.89								
10	ATOM	1454	O	LYS	379	20.363	40.551	76.014	1.00
	10.66								
	ATOM	1455	N	ILE	380	18.210	40.581	75.337	1.00
	7.78								
	ATOM	1457	CA	ILE	380	17.808	41.558	76.359	1.00
	6.62								
15	ATOM	1458	CB	ILE	380	16.334	42.064	76.148	1.00
	5.67								
	ATOM	1459	CG2	ILE	380	15.981	43.131	77.237	1.00
	7.47								
20	ATOM	1460	CG1	ILE	380	16.065	42.543	74.719	1.00
	8.91								
	ATOM	1461	CD1	ILE	380	17.119	43.535	74.160	1.00
	8.08								
	ATOM	1462	C	ILE	380	17.825	40.803	77.706	1.00
	7.03								
25	ATOM	1463	O	ILE	380	17.416	39.619	77.776	1.00
	7.34								
	ATOM	1464	N	ALA	381	18.230	41.493	78.784	1.00
	6.85								
30	ATOM	1466	CA	ALA	381	18.329	40.932	80.112	1.00
	8.40								
	ATOM	1467	CB	ALA	381	19.772	40.496	80.365	1.00
	10.10								
	ATOM	1468	C	ALA	381	17.904	41.940	81.181	1.00
	10.96								
35	ATOM	1469	O	ALA	381	17.528	43.064	80.865	1.00
	9.25								
	ATOM	1470	N	ASP	382	17.974	41.525	82.455	1.00
	13.46								
40	ATOM	1472	CA	ASP	382	17.659	42.358	83.628	1.00
	16.25								
	ATOM	1473	CB	ASP	382	18.723	43.436	83.849	1.00
	21.02								
	ATOM	1474	CG	ASP	382	19.811	42.987	84.821	1.00
	29.16								
45	ATOM	1475	OD1	ASP	382	20.331	41.856	84.688	1.00
	31.18								
	ATOM	1476	OD2	ASP	382	20.125	43.756	85.749	1.00
	32.56								
50	ATOM	1477	C	ASP	382	16.283	42.994	83.587	1.00
	16.63								
	ATOM	1478	O	ASP	382	16.115	44.215	83.506	1.00
	14.95								
	ATOM	1479	N	PHE	383	15.289	42.126	83.681	1.00
	15.23								
55	ATOM	1481	CA	PHE	383	13.897	42.495	83.607	1.00
	14.42								
	ATOM	1482	CB	PHE	383	13.135	41.269	83.123	1.00
	13.10								

	ATOM 11.15	1483	CG	PHE	383	13.552	40.824	81.756	1.00
	ATOM 11.32	1484	CD1	PHE	383	13.092	41.491	80.634	1.00
5	ATOM 11.61	1485	CD2	PHE	383	14.479	39.797	81.591	1.00
	ATOM 9.59	1486	CE1	PHE	383	13.559	41.145	79.387	1.00
10	ATOM 5.95	1487	CE2	PHE	383	14.951	39.452	80.330	1.00
	ATOM 6.03	1488	CZ	PHE	383	14.507	40.102	79.248	1.00
	ATOM 14.50	1489	C	PHE	383	13.306	42.959	84.914	1.00
15	ATOM 15.77	1490	O	PHE	383	12.112	43.049	85.035	1.00
	ATOM 14.37	1491	N	GLY	384	14.149	43.290	85.880	1.00
20	ATOM 14.45	1493	CA	GLY	384	13.677	43.701	87.189	1.00
	ATOM 14.19	1494	C	GLY	384	12.722	44.873	87.230	1.00
	ATOM 13.20	1495	O	GLY	384	11.838	44.934	88.115	1.00
25	ATOM 12.95	1496	N	LEU	385	12.920	45.828	86.326	1.00
	ATOM 13.18	1498	CA	LEU	385	12.053	47.005	86.300	1.00
30	ATOM 13.68	1499	CB	LEU	385	12.886	48.281	86.023	1.00
	ATOM 17.86	1500	CG	LEU	385	13.867	48.544	87.165	1.00
	ATOM 20.90	1501	CD1	LEU	385	14.944	49.590	86.734	1.00
35	ATOM 18.99	1502	CD2	LEU	385	13.095	49.015	88.401	1.00
	ATOM 11.66	1503	C	LEU	385	10.988	46.867	85.253	1.00
40	ATOM 12.38	1504	O	LEU	385	10.221	47.755	85.089	1.00
	ATOM 13.67	1505	N	ALA	386	10.953	45.748	84.523	1.00
	ATOM 13.66	1507	CA	ALA	386	9.965	45.580	83.454	1.00
45	ATOM 13.42	1508	CB	ALA	386	10.243	44.316	82.652	1.00
	ATOM 13.70	1509	C	ALA	386	8.522	45.549	83.999	1.00
50	ATOM 14.67	1510	O	ALA	386	8.262	45.036	85.069	1.00
	ATOM 14.30	1511	N	ARG	387	7.595	46.094	83.234	1.00
	ATOM 15.35	1513	CA	ARG	387	6.206	46.142	83.679	1.00
55	ATOM 14.74	1514	CB	ARG	387	5.880	47.488	84.315	1.00
	ATOM 17.36	1515	CG	ARG	387	6.758	47.859	85.514	1.00

	ATOM	1516	CD	ARG	387	6.533	46.935	86.696	1.00
	12.99								
	ATOM	1517	NE	ARG	387	7.249	47.427	87.855	1.00
	14.52								
5	ATOM	1519	CZ	ARG	387	8.366	46.878	88.316	1.00
	16.69								
	ATOM	1520	NH1	ARG	387	8.891	45.796	87.702	1.00
	14.56								
10	ATOM	1523	NH2	ARG	387	8.955	47.396	89.373	1.00
	13.33								
	ATOM	1526	C	ARG	387	5.272	45.969	82.523	1.00
	15.31								
	ATOM	1527	O	ARG	387	5.515	46.467	81.415	1.00
	13.91								
15	ATOM	1528	N	LEU	388	4.176	45.272	82.811	1.00
	17.64								
	ATOM	1530	CA	LEU	388	3.129	45.049	81.846	1.00
	20.19								
	ATOM	1531	CB	LEU	388	2.219	43.891	82.280	1.00
	21.96								
20	ATOM	1532	CG	LEU	388	1.040	43.441	81.406	1.00
	21.86								
	ATOM	1533	CD1	LEU	388	-0.225	44.187	81.738	1.00
	26.99								
25	ATOM	1534	CD2	LEU	388	1.340	43.579	79.946	1.00
	24.42								
	ATOM	1535	C	LEU	388	2.346	46.339	81.883	1.00
	22.45								
30	ATOM	1536	O	LEU	388	1.939	46.799	82.934	1.00
	22.82								
	ATOM	1537	N	ILE	389	2.126	46.903	80.710	1.00
	25.77								
	ATOM	1539	CA	ILE	389	1.391	48.147	80.569	1.00
	31.17								
35	ATOM	1540	CB	ILE	389	2.007	48.973	79.406	1.00
	32.68								
	ATOM	1541	CG2	ILE	389	0.977	49.811	78.700	1.00
	35.18								
	ATOM	1542	CG1	ILE	389	3.199	49.793	79.906	1.00
	33.70								
40	ATOM	1543	CD1	ILE	389	3.234	50.008	81.385	1.00
	33.09								
	ATOM	1544	C	ILE	389	-0.082	47.830	80.310	1.00
	33.94								
45	ATOM	1545	O	ILE	389	-0.479	47.374	79.223	1.00
	33.18								
	ATOM	1546	N	GLU	390	-0.884	48.033	81.343	1.00
	37.88								
	ATOM	1548	CA	GLU	390	-2.326	47.791	81.277	1.00
	42.55								
50	ATOM	1549	CB	GLU	390	-2.922	47.974	82.674	1.00
	45.03								
	ATOM	1550	CG	GLU	390	-1.924	47.709	83.827	1.00
	47.42								
55	ATOM	1551	CD	GLU	390	-1.907	46.263	84.320	1.00
	49.42								
	ATOM	1552	OE1	GLU	390	-2.865	45.504	84.044	1.00
	52.67								

	ATOM	1553	OE2	GLU	390	-0.941	45.888	85.023	1.00
	49.76								
	ATOM	1554	C	GLU	390	-2.891	48.829	80.297	1.00
	44.19								
5	ATOM	1555	O	GLU	390	-3.263	48.501	79.169	1.00
	45.01								
	ATOM	1556	N	ASP	391	-2.899	50.094	80.727	1.00
	45.67								
10	ATOM	1558	CA	ASP	391	-3.348	51.230	79.909	1.00
	46.27								
	ATOM	1559	CB	ASP	391	-4.036	52.278	80.795	1.00
	46.38								
	ATOM	1560	CG	ASP	391	-5.096	51.673	81.721	1.00
	46.67								
15	ATOM	1561	OD1	ASP	391	-4.768	50.776	82.530	1.00
	45.67								
	ATOM	1562	OD2	ASP	391	-6.254	52.123	81.663	1.00
	47.09								
	ATOM	1563	C	ASP	391	-2.027	51.786	79.353	1.00
20	46.49								
	ATOM	1564	O	ASP	391	-0.983	51.277	79.719	1.00
	49.17								
	ATOM	1565	N	ASN	392	-2.035	52.861	78.563	1.00
	45.78								
25	ATOM	1567	CA	ASN	392	-0.785	53.403	77.968	1.00
	44.41								
	ATOM	1568	CB	ASN	392	-1.056	54.720	77.217	1.00
	46.14								
	ATOM	1569	CG	ASN	392	0.185	55.244	76.462	1.00
30	47.37								
	ATOM	1570	OD1	ASN	392	0.403	56.459	76.344	1.00
	47.96								
	ATOM	1571	ND2	ASN	392	1.001	54.325	75.958	1.00
	48.86								
35	ATOM	1574	C	ASN	392	0.508	53.579	78.775	1.00
	42.14								
	ATOM	1575	O	ASN	392	1.602	53.302	78.249	1.00
	43.11								
	ATOM	1576	N	GLU	393	0.439	54.012	80.033	1.00
40	39.10								
	ATOM	1578	CA	GLU	393	1.686	54.237	80.765	1.00
	36.60								
	ATOM	1579	CB	GLU	393	2.077	55.731	80.683	1.00
	36.66								
45	ATOM	1580	CG	GLU	393	1.148	56.694	81.381	1.00
	39.54								
	ATOM	1581	CD	GLU	393	1.588	58.158	81.306	1.00
	42.34								
	ATOM	1582	OE1	GLU	393	1.618	58.811	82.369	1.00
50	42.59								
	ATOM	1583	OE2	GLU	393	1.862	58.676	80.197	1.00
	44.17								
	ATOM	1584	C	GLU	393	1.715	53.797	82.253	1.00
	34.46								
55	ATOM	1585	O	GLU	393	0.769	53.675	82.965	1.00
	35.21								
	ATOM	1586	N	PTR	394	3.001	53.540	82.661	1.00
	29.11								

	ATOM	1587	CA	PTR	394	3.298	53.169	84.025	1.00
	26.42								
	ATOM	1588	C	PTR	394	3.931	54.436	84.666	1.00
	24.90								
5	ATOM	1589	O	PTR	394	4.763	55.076	84.070	1.00
	23.07								
	ATOM	1590	CB	PTR	394	4.362	52.061	83.972	1.00
	23.81								
10	ATOM	1591	CG	PTR	394	4.671	51.487	85.340	1.00
	25.37								
	ATOM	1592	CD1	PTR	394	3.906	50.463	85.860	1.00
	25.42								
	ATOM	1593	CD2	PTR	394	5.728	51.987	86.078	1.00
	26.36								
15	ATOM	1594	CE1	PTR	394	4.220	49.955	87.118	1.00
	28.45								
	ATOM	1595	CE2	PTR	394	6.061	51.496	87.341	1.00
	29.97								
	ATOM	1596	CZ	PTR	394	5.286	50.470	87.832	1.00
20	30.84								
	ATOM	1597	OH	PTR	394	5.638	49.945	89.136	1.00
	38.55								
	ATOM	1598	P	PTR	394	6.362	50.808	90.275	1.00
	40.34								
25	ATOM	1599	O1P	PTR	394	7.387	51.592	89.615	1.00
	41.04								
	ATOM	1600	O2P	PTR	394	6.976	49.958	91.281	1.00
	41.13								
30	ATOM	1601	O3P	PTR	394	5.391	51.756	90.903	1.00
	44.63								
	ATOM	1602	N	THR	395	3.561	54.729	85.902	1.00
	25.26								
	ATOM	1604	CA	THR	395	4.088	55.931	86.611	1.00
	26.22								
35	ATOM	1605	CB	THR	395	2.923	56.896	87.089	1.00
	27.32								
	ATOM	1606	OG1	THR	395	2.050	57.159	85.991	1.00
	24.61								
40	ATOM	1608	CG2	THR	395	3.476	58.262	87.597	1.00
	26.90								
	ATOM	1609	C	THR	395	4.783	55.378	87.821	1.00
	27.47								
	ATOM	1610	O	THR	395	4.163	54.678	88.622	1.00
	28.67								
45	ATOM	1611	N	ALA	396	6.082	55.628	87.937	1.00
	28.84								
	ATOM	1613	CA	ALA	396	6.859	55.130	89.085	1.00
	31.81								
	ATOM	1614	CB	ALA	396	8.350	55.325	88.839	1.00
50	30.56								
	ATOM	1615	C	ALA	396	6.460	55.843	90.382	1.00
	34.00								
	ATOM	1616	O	ALA	396	5.639	56.762	90.363	1.00
	33.88								
55	ATOM	1617	N	ALA	397	7.058	55.432	91.500	1.00
	37.57								
	ATOM	1619	CA	ALA	397	6.773	56.045	92.803	1.00
	40.37								

	ATOM	1620	CB	ALA	397	7.104	55.068	93.922	1.00
	42.31								
	ATOM	1621	C	ALA	397	7.583	57.335	92.944	1.00
	42.80								
5	ATOM	1622	O	ALA	397	8.743	57.405	92.539	1.00
	42.60								
	ATOM	1623	N	GLU	398	6.970	58.362	93.528	1.00
	45.77								
10	ATOM	1625	CA	GLU	398	7.610	59.683	93.673	1.00
	47.84								
	ATOM	1626	CB	GLU	398	6.734	60.601	94.523	1.00
	50.12								
	ATOM	1627	CG	GLU	398	5.373	60.880	93.884	1.00
	53.67								
15	ATOM	1628	CD	GLU	398	5.490	61.473	92.490	1.00
	55.50								
	ATOM	1629	OE1	GLU	398	5.992	62.612	92.377	1.00
	56.86								
20	ATOM	1630	OE2	GLU	398	5.085	60.805	91.512	1.00
	56.88								
	ATOM	1631	C	GLU	398	9.082	59.802	94.094	1.00
	47.14								
	ATOM	1632	O	GLU	398	9.768	60.765	93.719	1.00
	48.42								
25	ATOM	1633	N	GLY	399	9.585	58.839	94.859	1.00
	46.48								
	ATOM	1635	CA	GLY	399	10.982	58.891	95.266	1.00
	44.00								
30	ATOM	1636	C	GLY	399	11.881	58.026	94.394	1.00
	41.93								
	ATOM	1637	O	GLY	399	13.058	57.832	94.698	1.00
	43.45								
	ATOM	1638	N	ALA	400	11.335	57.512	93.296	1.00
	40.42								
35	ATOM	1640	CA	ALA	400	12.093	56.644	92.391	1.00
	38.09								
	ATOM	1641	CB	ALA	400	11.142	55.857	91.493	1.00
	38.53								
40	ATOM	1642	C	ALA	400	13.103	57.412	91.554	1.00
	34.64								
	ATOM	1643	O	ALA	400	12.784	58.434	90.969	1.00
	35.67								
	ATOM	1644	N	ALA	401	14.338	56.925	91.529	1.00
	31.89								
45	ATOM	1646	CA	ALA	401	15.406	57.567	90.768	1.00
	29.60								
	ATOM	1647	CB	ALA	401	16.568	57.955	91.704	1.00
	29.17								
50	ATOM	1648	C	ALA	401	15.888	56.645	89.639	1.00
	27.73								
	ATOM	1649	O	ALA	401	15.948	55.412	89.786	1.00
	29.01								
	ATOM	1650	N	PHE	402	16.194	57.245	88.496	1.00
	24.12								
55	ATOM	1652	CA	PHE	402	16.642	56.507	87.307	1.00
	22.37								
	ATOM	1653	CB	PHE	402	15.519	56.502	86.279	1.00
	22.95								

	ATOM	1654	CG	PHE	402	14.274	55.838	86.781	1.00
	24.95								
	ATOM	1655	CD1	PHE	402	14.171	54.443	86.775	1.00
	25.08								
5	ATOM	1656	CD2	PHE	402	13.238	56.598	87.349	1.00
	25.66								
	ATOM	1657	CE1	PHE	402	13.056	53.804	87.336	1.00
	26.56								
10	ATOM	1658	CE2	PHE	402	12.117	55.971	87.918	1.00
	25.82								
	ATOM	1659	CZ	PHE	402	12.028	54.572	87.910	1.00
	26.72								
	ATOM	1660	C	PHE	402	17.903	57.126	86.736	1.00
	19.57								
15	ATOM	1661	O	PHE	402	18.177	58.296	86.994	1.00
	20.18								
	ATOM	1662	N	PRO	403	18.722	56.338	86.020	1.00
	17.47								
20	ATOM	1663	CD	PRO	403	18.495	54.940	85.630	1.00
	18.55								
	ATOM	1664	CA	PRO	403	19.966	56.858	85.428	1.00
	16.70								
	ATOM	1665	CB	PRO	403	20.540	55.657	84.674	1.00
	16.97								
25	ATOM	1666	CG	PRO	403	19.910	54.447	85.358	1.00
	20.19								
	ATOM	1667	C	PRO	403	19.587	57.948	84.451	1.00
	15.54								
30	ATOM	1668	O	PRO	403	18.954	57.698	83.415	1.00
	14.87								
	ATOM	1669	N	ILE	404	19.946	59.173	84.797	1.00
	14.66								
	ATOM	1671	CA	ILE	404	19.611	60.333	83.977	1.00
	13.68								
35	ATOM	1672	CB	ILE	404	20.166	61.635	84.611	1.00
	13.64								
	ATOM	1673	CG2	ILE	404	20.070	62.847	83.635	1.00
	13.49								
40	ATOM	1674	CG1	ILE	404	19.452	61.908	85.942	1.00
	14.28								
	ATOM	1675	CD1	ILE	404	17.965	61.923	85.854	1.00
	21.89								
	ATOM	1676	C	ILE	404	19.988	60.283	82.514	1.00
	10.49								
45	ATOM	1677	O	ILE	404	19.189	60.623	81.657	1.00
	13.39								
	ATOM	1678	N	LYS	405	21.211	59.857	82.213	1.00
	10.10								
50	ATOM	1680	CA	LYS	405	21.691	59.833	80.819	1.00
	8.60								
	ATOM	1681	CB	LYS	405	23.200	59.603	80.798	1.00
	8.67								
	ATOM	1682	CG	LYS	405	24.036	60.751	81.412	1.00
	11.05								
55	ATOM	1683	CD	LYS	405	25.544	60.429	81.442	1.00
	15.41								
	ATOM	1684	CE	LYS	405	26.382	61.629	81.950	1.00
	18.38								

	ATOM	1685	NZ	LYS	405	27.786	61.702	81.303	1.00
	23.91								
	ATOM	1689	C	LYS	405	21.000	58.872	79.872	1.00
	7.88								
5	ATOM	1690	O	LYS	405	21.058	59.069	78.644	1.00
	7.04								
	ATOM	1691	N	TRP	406	20.400	57.804	80.412	1.00
	8.72								
10	ATOM	1693	CA	TRP	406	19.698	56.811	79.573	1.00
	9.83								
	ATOM	1694	CB	TRP	406	20.016	55.381	80.039	1.00
	11.56								
	ATOM	1695	CG	TRP	406	21.358	54.884	79.663	1.00
	10.68								
15	ATOM	1696	CD2	TRP	406	22.573	55.093	80.384	1.00
	10.60								
	ATOM	1697	CE2	TRP	406	23.582	54.422	79.676	1.00
	10.53								
	ATOM	1698	CE3	TRP	406	22.896	55.786	81.554	1.00
	7.38								
20	ATOM	1699	CD1	TRP	406	21.666	54.138	78.588	1.00
	13.93								
	ATOM	1700	NE1	TRP	406	23.006	53.854	78.585	1.00
	14.24								
25	ATOM	1702	CZ2	TRP	406	24.907	54.424	80.098	1.00
	11.04								
	ATOM	1703	CZ3	TRP	406	24.215	55.786	81.984	1.00
	10.50								
	ATOM	1704	CH2	TRP	406	25.208	55.112	81.261	1.00
30	7.77								
	ATOM	1705	C	TRP	406	18.181	56.919	79.606	1.00
	11.42								
	ATOM	1706	O	TRP	406	17.497	56.267	78.824	1.00
	11.43								
35	ATOM	1707	N	THR	407	17.652	57.725	80.524	1.00
	10.56								
	ATOM	1709	CA	THR	407	16.222	57.848	80.706	1.00
	11.52								
	ATOM	1710	CB	THR	407	15.911	57.899	82.231	1.00
40	10.98								
	ATOM	1711	OG1	THR	407	16.569	56.798	82.877	1.00
	12.19								
	ATOM	1713	CG2	THR	407	14.412	57.806	82.508	1.00
	11.63								
45	ATOM	1714	C	THR	407	15.555	59.015	79.938	1.00
	11.66								
	ATOM	1715	O	THR	407	16.073	60.099	79.919	1.00
	12.05								
	ATOM	1716	N	ALA	408	14.409	58.746	79.304	1.00
50	9.19								
	ATOM	1718	CA	ALA	408	13.645	59.741	78.507	1.00
	9.76								
	ATOM	1719	CB	ALA	408	12.411	59.090	77.897	1.00
	10.54								
55	ATOM	1720	C	ALA	408	13.209	60.874	79.419	1.00
	9.45								
	ATOM	1721	O	ALA	408	12.950	60.646	80.558	1.00
	10.32								



	ATOM 10.88	1722	N	PRO	409	13.132	62.115	78.907	1.00
	ATOM 11.22	1723	CD	PRO	409	13.410	62.579	77.551	1.00
5	ATOM 13.35	1724	CA	PRO	409	12.731	63.248	79.731	1.00
	ATOM 13.57	1725	CB	PRO	409	12.683	64.396	78.716	1.00
10	ATOM 15.33	1726	CG	PRO	409	13.756	63.998	77.791	1.00
	ATOM 13.71	1727	C	PRO	409	11.422	63.084	80.469	1.00
	ATOM 13.85	1728	O	PRO	409	11.356	63.418	81.654	1.00
15	ATOM 14.45	1729	N	GLU	410	10.392	62.555	79.789	1.00
	ATOM 15.87	1731	CA	GLU	410	9.074	62.375	80.435	1.00
20	ATOM 15.43	1732	CB	GLU	410	7.999	61.873	79.451	1.00
	ATOM 16.98	1733	CG	GLU	410	8.163	60.399	78.938	1.00
	ATOM 16.27	1734	CD	GLU	410	9.074	60.243	77.711	1.00
25	ATOM 17.12	1735	OE1	GLU	410	9.822	61.196	77.351	1.00
	ATOM 14.45	1736	OE2	GLU	410	9.054	59.155	77.094	1.00
30	ATOM 16.20	1737	C	GLU	410	9.163	61.485	81.641	1.00
	ATOM 15.55	1738	O	GLU	410	8.487	61.725	82.641	1.00
	ATOM 16.98	1739	N	ALA	411	10.064	60.490	81.597	1.00
35	ATOM 18.93	1741	CA	ALA	411	10.245	59.586	82.743	1.00
	ATOM 18.93	1742	CB	ALA	411	11.019	58.316	82.320	1.00
40	ATOM 20.04	1743	C	ALA	411	10.995	60.298	83.877	1.00
	ATOM 20.20	1744	O	ALA	411	10.733	60.065	85.080	1.00
	ATOM 19.47	1745	N	ILE	412	12.000	61.102	83.513	1.00
45	ATOM 19.22	1747	CA	ILE	412	12.764	61.853	84.542	1.00
	ATOM 19.14	1748	CB	ILE	412	14.015	62.534	83.940	1.00
50	ATOM 19.48	1749	CG2	ILE	412	14.636	63.570	84.938	1.00
	ATOM 16.00	1750	CG1	ILE	412	15.000	61.489	83.436	1.00
	ATOM 17.37	1751	CD1	ILE	412	15.987	62.079	82.388	1.00
55	ATOM 18.91	1752	C	ILE	412	11.896	62.964	85.178	1.00
	ATOM 19.37	1753	O	ILE	412	11.864	63.141	86.391	1.00

5	ATOM 19.40	1754	N	ASN	413	11.172	63.700	84.353	1.00
	ATOM 21.43	1756	CA	ASN	413	10.334	64.805	84.878	1.00
	ATOM 18.83	1757	CB	ASN	413	10.085	65.819	83.770	1.00
	ATOM 19.10	1758	CG	ASN	413	11.381	66.386	83.221	1.00
10	ATOM 19.65	1759	OD1	ASN	413	12.332	66.515	83.933	1.00
	ATOM 20.84	1760	ND2	ASN	413	11.409	66.692	81.955	1.00
15	ATOM 22.30	1763	C	ASN	413	8.990	64.407	85.524	1.00
	ATOM 22.79	1764	O	ASN	413	8.527	65.040	86.478	1.00
	ATOM 22.84	1765	N	TYR	414	8.402	63.303	85.060	1.00
20	ATOM 23.38	1767	CA	TYR	414	7.105	62.891	85.555	1.00
	ATOM 25.46	1768	CB	TYR	414	6.085	63.121	84.441	1.00
	ATOM 29.64	1769	CG	TYR	414	6.276	64.428	83.670	1.00
25	ATOM 30.70	1770	CD1	TYR	414	6.421	65.649	84.338	1.00
	ATOM 31.19	1771	CE1	TYR	414	6.547	66.856	83.632	1.00
30	ATOM 29.95	1772	CD2	TYR	414	6.267	64.439	82.278	1.00
	ATOM 32.57	1773	CE2	TYR	414	6.385	65.621	81.566	1.00
	ATOM 33.21	1774	CZ	TYR	414	6.522	66.831	82.247	1.00
35	ATOM 34.76	1775	OH	TYR	414	6.616	68.018	81.534	1.00
	ATOM 23.24	1777	C	TYR	414	6.934	61.478	86.102	1.00
40	ATOM 25.90	1778	O	TYR	414	5.872	61.162	86.566	1.00
	ATOM 21.41	1779	N	GLY	415	7.962	60.634	86.046	1.00
	ATOM 21.21	1781	CA	GLY	415	7.819	59.265	86.524	1.00
45	ATOM 20.23	1782	C	GLY	415	7.029	58.446	85.492	1.00
	ATOM 21.38	1783	O	GLY	415	6.758	57.279	85.671	1.00
50	ATOM 20.26	1784	N	THR	416	6.787	59.049	84.349	1.00
	ATOM 21.50	1786	CA	THR	416	6.014	58.442	83.285	1.00
	ATOM 23.40	1787	CB	THR	416	5.163	59.566	82.611	1.00
55	ATOM 27.04	1788	OG1	THR	416	3.916	59.688	83.329	1.00
	ATOM 26.75	1790	CG2	THR	416	4.890	59.281	81.162	1.00

5	ATOM 19.43	1791	C	THR	416	6.836	57.629	82.252	1.00
	ATOM 16.41	1792	O	THR	416	7.646	58.184	81.497	1.00
	ATOM 16.02	1793	N	PHE	417	6.575	56.320	82.209	1.00
10	ATOM 14.98	1795	CA	PHE	417	7.259	55.414	81.278	1.00
	ATOM 14.22	1796	CB	PHE	417	7.953	54.294	82.034	1.00
	ATOM 13.32	1797	CG	PHE	417	9.114	54.722	82.869	1.00
15	ATOM 12.88	1798	CD1	PHE	417	8.929	55.042	84.205	1.00
	ATOM 11.83	1799	CD2	PHE	417	10.414	54.690	82.352	1.00
	ATOM 16.16	1800	CE1	PHE	417	10.029	55.315	85.024	1.00
20	ATOM 9.52	1801	CE2	PHE	417	11.500	54.953	83.152	1.00
	ATOM 12.45	1802	CZ	PHE	417	11.322	55.264	84.488	1.00
	ATOM 14.56	1803	C	PHE	417	6.333	54.716	80.290	1.00
25	ATOM 14.80	1804	O	PHE	417	5.238	54.220	80.662	1.00
	ATOM 13.23	1805	N	THR	418	6.727	54.697	79.023	1.00
	ATOM 13.01	1807	CA	THR	418	5.959	53.962	78.016	1.00
30	ATOM 14.60	1808	CB	THR	418	5.059	54.873	77.061	1.00
	ATOM 16.70	1809	OG1	THR	418	5.907	55.558	76.151	1.00
	ATOM 11.08	1811	CG2	THR	418	4.217	55.892	77.866	1.00
35	ATOM 11.75	1812	C	THR	418	7.003	53.283	77.163	1.00
	ATOM 11.33	1813	O	THR	418	8.216	53.410	77.403	1.00
	ATOM 11.63	1814	N	ILE	419	6.555	52.534	76.167	1.00
40	ATOM 10.87	1816	CA	ILE	419	7.501	51.869	75.297	1.00
	ATOM 12.79	1817	CB	ILE	419	6.801	50.910	74.297	1.00
	ATOM 9.94	1818	CG2	ILE	419	5.976	51.677	73.171	1.00
45	ATOM 9.84	1819	CG1	ILE	419	7.857	49.987	73.647	1.00
	ATOM 9.11	1820	CD1	ILE	419	8.638	49.121	74.690	1.00
	ATOM 12.14	1821	C	ILE	419	8.363	52.931	74.574	1.00
50	ATOM 11.23	1822	O	ILE	419	9.524	52.659	74.185	1.00
	ATOM 8.11	1823	N	LYS	420	7.826	54.154	74.460	1.00

5	ATOM 7.87	1825	CA	LYS	420	8.552	55.237	73.788	1.00
	ATOM 6.52	1826	CB	LYS	420	7.615	56.403	73.489	1.00
	ATOM 5.66	1827	CG	LYS	420	6.541	56.046	72.445	1.00
	ATOM 5.00	1828	CD	LYS	420	7.131	55.633	71.125	1.00
	ATOM 4.07	1829	CE	LYS	420	5.982	55.321	70.158	1.00
10	ATOM 5.92	1830	NZ	LYS	420	6.425	54.699	68.865	1.00
	ATOM 6.25	1834	C	LYS	420	9.711	55.725	74.645	1.00
	ATOM 9.15	1835	O	LYS	420	10.633	56.357	74.124	1.00
15	ATOM 3.44	1836	N	SER	421	9.622	55.508	75.954	0.84
	ATOM 7.00	1838	CA	SER	421	10.712	55.855	76.853	0.84
	ATOM 5.36	1839	CB	SER	421	10.320	55.736	78.334	0.84
	ATOM 11.88	1840	OG	SER	421	9.199	56.532	78.638	0.84
20	ATOM 6.33	1842	C	SER	421	11.825	54.875	76.566	0.84
	ATOM 5.12	1843	O	SER	421	12.967	55.220	76.622	0.84
	ATOM 9.14	1844	N	ASP	422	11.484	53.607	76.334	1.00
25	ATOM 8.70	1846	CA	ASP	422	12.517	52.597	76.025	1.00
	ATOM 12.07	1847	CB	ASP	422	11.885	51.196	75.904	1.00
	ATOM 12.39	1848	CG	ASP	422	11.572	50.563	77.259	1.00
30	ATOM 10.34	1849	OD1	ASP	422	12.056	51.022	78.327	1.00
	ATOM 11.32	1850	OD2	ASP	422	10.816	49.582	77.246	1.00
	ATOM 6.58	1851	C	ASP	422	13.184	52.950	74.686	1.00
35	ATOM 8.49	1852	O	ASP	422	14.369	52.729	74.503	1.00
	ATOM 5.50	1853	N	VAL	423	12.406	53.490	73.743	1.00
	ATOM 6.60	1855	CA	VAL	423	12.958	53.869	72.455	1.00
40	ATOM 5.46	1856	CB	VAL	423	11.861	54.360	71.466	1.00
	ATOM 6.60	1857	CG1	VAL	423	12.489	55.077	70.272	1.00
	ATOM 7.26	1858	CG2	VAL	423	11.039	53.179	70.942	1.00
45	ATOM 7.12	1859	C	VAL	423	14.038	54.958	72.656	1.00
	ATOM 5.42	1860	O	VAL	423	15.065	54.917	72.020	1.00

	ATOM 6.23	1861	N	TRP	424	13.783	55.910	73.554	1.00
	ATOM 6.55	1863	CA	TRP	424	14.763	56.979	73.845	1.00
5	ATOM 5.57	1864	CB	TRP	424	14.208	57.882	74.954	1.00
	ATOM 7.05	1865	CG	TRP	424	15.192	58.959	75.346	1.00
10	ATOM 6.30	1866	CD2	TRP	424	15.151	60.335	74.967	1.00
	ATOM 8.37	1867	CE2	TRP	424	16.308	60.951	75.529	1.00
	ATOM 7.64	1868	CE3	TRP	424	14.245	61.121	74.229	1.00
15	ATOM 5.60	1869	CD1	TRP	424	16.318	58.800	76.109	1.00
	ATOM 5.35	1870	NE1	TRP	424	16.980	59.990	76.219	1.00
20	ATOM 10.22	1872	CZ2	TRP	424	16.590	62.315	75.375	1.00
	ATOM 9.61	1873	CZ3	TRP	424	14.518	62.503	74.075	1.00
	ATOM 7.29	1874	CH2	TRP	424	15.680	63.078	74.643	1.00
25	ATOM 6.20	1875	C	TRP	424	16.060	56.280	74.363	1.00
	ATOM 7.99	1876	O	TRP	424	17.158	56.541	73.879	1.00
30	ATOM 3.20	1877	N	SER	425	15.885	55.412	75.355	0.74
	ATOM 4.31	1879	CA	SER	425	16.990	54.663	75.922	0.74
	ATOM 2.00	1880	CB	SER	425	16.495	53.701	77.008	0.74
35	ATOM 2.00	1881	OG	SER	425	15.803	54.395	78.026	0.74
	ATOM 3.33	1883	C	SER	425	17.737	53.913	74.846	0.74
40	ATOM 2.42	1884	O	SER	425	18.950	53.850	74.888	0.74
	ATOM 5.45	1885	N	PHE	426	17.007	53.293	73.903	1.00
	ATOM 6.49	1887	CA	PHE	426	17.657	52.573	72.797	1.00
45	ATOM 4.63	1888	CB	PHE	426	16.623	51.923	71.873	1.00
	ATOM 7.25	1889	CG	PHE	426	17.220	51.113	70.753	1.00
50	ATOM 7.49	1890	CD1	PHE	426	17.757	49.839	70.993	1.00
	ATOM 5.54	1891	CD2	PHE	426	17.257	51.607	69.464	1.00
	ATOM 7.13	1892	CE1	PHE	426	18.321	49.102	69.956	1.00
55	ATOM 7.86	1893	CE2	PHE	426	17.820	50.860	68.434	1.00
	ATOM 5.60	1894	CZ	PHE	426	18.354	49.600	68.698	1.00

	ATOM 8.58	1895	C	PHE	426	18.584	53.554	72.015	1.00
	ATOM 5.97	1896	O	PHE	426	19.686	53.185	71.563	1.00
5	ATOM 6.15	1897	N	GLY	427	18.113	54.784	71.810	1.00
	ATOM 6.03	1899	CA	GLY	427	18.949	55.784	71.131	1.00
10	ATOM 4.54	1900	C	GLY	427	20.276	55.953	71.872	1.00
	ATOM 5.34	1901	O	GLY	427	21.341	55.962	71.238	1.00
	ATOM 4.21	1902	N	ILE	428	20.215	56.014	73.195	1.00
15	ATOM 3.97	1904	CA	ILE	428	21.401	56.164	74.015	1.00
	ATOM 4.96	1905	CB	ILE	428	21.090	56.406	75.483	1.00
20	ATOM 2.19	1906	CG2	ILE	428	22.463	56.522	76.258	1.00
	ATOM 7.36	1907	CG1	ILE	428	20.164	57.671	75.681	1.00
	ATOM 3.13	1908	CD1	ILE	428	20.782	58.976	75.203	1.00
25	ATOM 8.27	1909	C	ILE	428	22.297	54.873	73.914	1.00
	ATOM 4.68	1910	O	ILE	428	23.547	54.933	73.888	1.00
30	ATOM 7.27	1911	N	LEU	429	21.637	53.711	73.972	1.00
	ATOM 6.62	1913	CA	LEU	429	22.327	52.410	73.827	1.00
	ATOM 6.35	1914	CB	LEU	429	21.296	51.253	73.959	1.00
35	ATOM 11.27	1915	CG	LEU	429	21.845	49.877	74.329	1.00
	ATOM 8.31	1916	CD1	LEU	429	20.673	48.933	74.756	1.00
40	ATOM 12.01	1917	CD2	LEU	429	22.560	49.308	73.139	1.00
	ATOM 6.20	1918	C	LEU	429	23.106	52.375	72.491	1.00
	ATOM 5.46	1919	O	LEU	429	24.256	51.910	72.453	1.00
45	ATOM 6.35	1920	N	LEU	430	22.530	52.859	71.384	1.00
	ATOM 7.66	1922	CA	LEU	430	23.257	52.883	70.118	1.00
50	ATOM 9.11	1923	CB	LEU	430	22.405	53.531	69.001	1.00
	ATOM 12.71	1924	CG	LEU	430	21.088	52.860	68.575	1.00
	ATOM 12.19	1925	CD1	LEU	430	20.402	53.710	67.469	1.00
55	ATOM 11.08	1926	CD2	LEU	430	21.364	51.433	68.038	1.00
	ATOM 8.68	1927	C	LEU	430	24.609	53.674	70.239	1.00

	ATOM 7.43	1928	O	LEU	430	25.574	53.393	69.501	1.00
	ATOM 8.14	1929	N	THR	431	24.651	54.720	71.075	1.00
5	ATOM 8.38	1931	CA	THR	431	25.921	55.506	71.257	1.00
	ATOM 4.90	1932	CB	THR	431	25.741	56.859	72.021	1.00
10	ATOM 3.60	1933	OG1	THR	431	25.469	56.643	73.392	1.00
	ATOM 5.55	1935	CG2	THR	431	24.529	57.704	71.425	1.00
	ATOM 8.62	1936	C	THR	431	26.923	54.631	72.005	1.00
15	ATOM 9.17	1937	O	THR	431	28.125	54.631	71.695	1.00
	ATOM 7.90	1938	N	GLU	432	26.424	53.860	72.967	1.00
20	ATOM 10.08	1940	CA	GLU	432	27.328	52.951	73.694	1.00
	ATOM 5.99	1941	CB	GLU	432	26.627	52.186	74.815	1.00
	ATOM 10.88	1942	CG	GLU	432	26.143	53.057	75.932	1.00
25	ATOM 9.59	1943	CD	GLU	432	25.363	52.313	76.946	1.00
	ATOM 10.03	1944	OE1	GLU	432	24.175	52.004	76.677	1.00
30	ATOM 11.37	1945	OE2	GLU	432	25.905	52.072	78.050	1.00
	ATOM 8.62	1946	C	GLU	432	27.926	51.942	72.745	1.00
	ATOM 11.14	1947	O	GLU	432	29.097	51.536	72.916	1.00
35	ATOM 8.61	1948	N	ILE	433	27.137	51.487	71.778	1.00
	ATOM 10.01	1950	CA	ILE	433	27.604	50.462	70.831	1.00
40	ATOM 10.36	1951	CB	ILE	433	26.413	49.891	69.976	1.00
	ATOM 9.69	1952	CG2	ILE	433	26.928	49.148	68.750	1.00
	ATOM 7.16	1953	CG1	ILE	433	25.555	48.915	70.793	1.00
45	ATOM 9.87	1954	CD1	ILE	433	24.341	48.431	69.943	1.00
	ATOM 13.45	1955	C	ILE	433	28.702	50.975	69.916	1.00
50	ATOM 13.31	1956	O	ILE	433	29.819	50.391	69.800	1.00
	ATOM 10.37	1957	N	VAL	434	28.426	52.119	69.304	1.00
	ATOM 13.65	1959	CA	VAL	434	29.357	52.736	68.363	1.00
55	ATOM 14.15	1960	CB	VAL	434	28.624	53.819	67.515	1.00
	ATOM 12.09	1961	CG1	VAL	434	28.526	55.101	68.291	1.00

5	ATOM 17.74	1962	CG2	VAL	434	29.335	54.029	66.212	1.00
	ATOM 12.97	1963	C	VAL	434	30.635	53.329	69.002	1.00
	ATOM 17.99	1964	O	VAL	434	31.570	53.674	68.308	1.00
	ATOM 11.64	1965	N	THR	435	30.646	53.500	70.314	1.00
	ATOM 11.78	1967	CA	THR	435	31.815	54.028	70.993	1.00
10	ATOM 12.27	1968	CB	THR	435	31.458	55.206	71.945	1.00
	ATOM 10.57	1969	OG1	THR	435	30.573	54.737	72.967	1.00
	ATOM 8.79	1971	CG2	THR	435	30.795	56.338	71.192	1.00
15	ATOM 12.81	1972	C	THR	435	32.475	52.911	71.816	1.00
	ATOM 10.66	1973	O	THR	435	33.285	53.166	72.710	1.00
	ATOM 12.55	1974	N	HIS	436	32.037	51.667	71.581	1.00
	ATOM 13.21	1976	CA	HIS	436	32.599	50.520	72.294	1.00
20	ATOM 16.87	1977	CB	HIS	436	34.044	50.249	71.838	1.00
	ATOM 18.59	1978	CG	HIS	436	34.139	49.679	70.445	1.00
	ATOM 20.86	1979	CD2	HIS	436	34.228	50.288	69.233	1.00
25	ATOM 20.34	1980	ND1	HIS	436	34.148	48.318	70.189	1.00
	ATOM 19.64	1982	CE1	HIS	436	34.241	48.112	68.884	1.00
	ATOM 21.05	1983	NE2	HIS	436	34.287	49.287	68.280	1.00
30	ATOM 13.02	1985	C	HIS	436	32.485	50.659	73.793	1.00
	ATOM 12.87	1986	O	HIS	436	33.406	50.445	74.542	1.00
	ATOM 9.87	1987	N	GLY	437	31.297	51.065	74.231	1.00
35	ATOM 9.32	1989	CA	GLY	437	31.041	51.176	75.644	1.00
	ATOM 10.65	1990	C	GLY	437	31.324	52.449	76.409	1.00
	ATOM 14.03	1991	O	GLY	437	31.235	52.408	77.628	1.00
40	ATOM 7.95	1992	N	ARG	438	31.619	53.559	75.744	0.58
	ATOM 9.13	1994	CA	ARG	438	31.865	54.845	76.434	0.58
	ATOM 7.13	1995	CB	ARG	438	32.379	55.911	75.427	0.58
45	ATOM 13.47	1996	CG	ARG	438	32.767	57.291	76.016	0.58
	ATOM 15.92	1997	CD	ARG	438	33.308	58.331	74.947	0.58



	ATOM 20.59	1998	NE	ARG	438	34.144	59.360	75.592	0.58
	ATOM 22.05	2000	CZ	ARG	438	34.649	60.453	75.009	0.58
5	ATOM 24.21	2001	NH1	ARG	438	34.425	60.731	73.733	0.58
	ATOM 24.37	2004	NH2	ARG	438	35.402	61.282	75.713	0.58
10	ATOM 8.53	2007	C	ARG	438	30.587	55.365	77.100	0.58
	ATOM 7.09	2008	O	ARG	438	29.498	55.128	76.627	0.58
	ATOM 10.66	2009	N	ILE	439	30.752	56.178	78.145	1.00
15	ATOM 10.11	2011	CA	ILE	439	29.627	56.760	78.878	1.00
	ATOM 12.96	2012	CB	ILE	439	30.081	57.320	80.241	1.00
	ATOM 10.12	2013	CG2	ILE	439	28.968	58.213	80.913	1.00
20	ATOM 14.57	2014	CG1	ILE	439	30.427	56.146	81.159	1.00
	ATOM 21.31	2015	CD1	ILE	439	30.995	56.620	82.485	1.00
25	ATOM 8.83	2016	C	ILE	439	29.009	57.863	78.018	1.00
	ATOM 6.52	2017	O	ILE	439	29.737	58.628	77.301	1.00
	ATOM 4.21	2018	N	PRO	440	27.664	57.830	77.895	0.43
30	ATOM 3.42	2019	CD	PRO	440	26.757	56.807	78.445	0.43
	ATOM 2.93	2020	CA	PRO	440	26.944	58.828	77.097	0.43
35	ATOM 2.42	2021	CB	PRO	440	25.470	58.376	77.180	0.43
	ATOM 3.41	2022	CG	PRO	440	25.406	57.469	78.330	0.43
	ATOM 4.35	2023	C	PRO	440	27.162	60.255	77.570	0.43
40	ATOM 2.00	2024	O	PRO	440	27.467	60.519	78.721	0.43
	ATOM 8.70	2025	N	TYR	441	27.030	61.180	76.626	1.00
45	ATOM 11.22	2027	CA	TYR	441	27.242	62.604	76.875	1.00
	ATOM 7.10	2028	CB	TYR	441	26.141	63.160	77.783	1.00
	ATOM 8.04	2029	CG	TYR	441	24.737	62.959	77.225	1.00
50	ATOM 5.02	2030	CD1	TYR	441	24.199	63.851	76.299	1.00
	ATOM 6.62	2031	CE1	TYR	441	22.838	63.713	75.834	1.00
55	ATOM 8.69	2032	CD2	TYR	441	23.922	61.910	77.693	1.00
	ATOM 6.35	2033	CE2	TYR	441	22.585	61.771	77.265	1.00

	ATOM 3.59	2034	CZ	TYR	441	22.062	62.690	76.327	1.00
	ATOM 5.76	2035	OH	TYR	441	20.791	62.567	75.906	1.00
5	ATOM 13.13	2037	C	TYR	441	28.648	62.832	77.480	1.00
	ATOM 13.31	2038	O	TYR	441	28.782	63.363	78.580	1.00
10	ATOM 16.46	2039	N	PRO	442	29.708	62.474	76.720	1.00
	ATOM 16.07	2040	CD	PRO	442	29.650	62.023	75.305	1.00
	ATOM 18.90	2041	CA	PRO	442	31.099	62.634	77.171	1.00
15	ATOM 18.71	2042	CB	PRO	442	31.912	62.369	75.896	1.00
	ATOM 17.72	2043	CG	PRO	442	31.026	61.506	75.056	1.00
20	ATOM 17.44	2044	C	PRO	442	31.408	64.054	77.734	1.00
	ATOM 20.36	2045	O	PRO	442	30.973	65.047	77.201	1.00
	ATOM 19.95	2046	N	GLY	443	31.989	64.100	78.923	1.00
25	ATOM 18.74	2048	CA	GLY	443	32.369	65.379	79.530	1.00
	ATOM 18.63	2049	C	GLY	443	31.240	66.180	80.156	1.00
30	ATOM 17.80	2050	O	GLY	443	31.448	67.364	80.517	1.00
	ATOM 14.22	2051	N	MET	444	30.074	65.556	80.346	1.00
	ATOM 13.92	2053	CA	MET	444	28.943	66.262	80.933	1.00
35	ATOM 12.80	2054	CB	MET	444	27.822	66.473	79.889	1.00
	ATOM 12.70	2055	CG	MET	444	28.284	67.080	78.562	1.00
40	ATOM 16.71	2056	SD	MET	444	27.057	67.124	77.232	1.00
	ATOM 14.85	2057	CE	MET	444	25.673	67.839	78.021	1.00
	ATOM 12.83	2058	C	MET	444	28.368	65.584	82.168	1.00
45	ATOM 13.52	2059	O	MET	444	28.274	64.353	82.236	1.00
	ATOM 9.18	2060	N	THR	445	28.003	66.408	83.154	1.00
50	ATOM 9.96	2062	CA	THR	445	27.357	65.947	84.366	1.00
	ATOM 12.35	2063	CB	THR	445	27.543	66.962	85.483	1.00
	ATOM 10.49	2064	OG1	THR	445	26.889	68.200	85.111	1.00
55	ATOM 11.76	2066	CG2	THR	445	29.034	67.191	85.707	1.00
	ATOM 9.07	2067	C	THR	445	25.858	65.853	84.049	1.00

	ATOM	2068	O	THR	445	25.413	66.299	83.020	1.00
	7.89								
	ATOM	2069	N	ASN	446	25.096	65.245	84.931	1.00
	8.86								
5	ATOM	2071	CA	ASN	446	23.646	65.121	84.749	1.00
	11.83								
	ATOM	2072	CB	ASN	446	23.056	64.281	85.904	1.00
	12.92								
10	ATOM	2073	CG	ASN	446	23.418	62.783	85.799	1.00
	13.53								
	ATOM	2074	OD1	ASN	446	23.732	62.290	84.737	1.00
	14.11								
	ATOM	2075	ND2	ASN	446	23.300	62.072	86.888	1.00
	13.23								
15	ATOM	2078	C	ASN	446	22.927	66.489	84.591	1.00
	11.18								
	ATOM	2079	O	ASN	446	22.005	66.609	83.781	1.00
	12.97								
	ATOM	2080	N	PRO	447	23.260	67.502	85.440	1.00
	12.38								
20	ATOM	2081	CD	PRO	447	23.968	67.358	86.733	1.00
	10.34								
	ATOM	2082	CA	PRO	447	22.629	68.832	85.325	1.00
	11.77								
25	ATOM	2083	CB	PRO	447	23.305	69.620	86.456	1.00
	14.03								
	ATOM	2084	CG	PRO	447	23.500	68.549	87.537	1.00
	12.63								
30	ATOM	2085	C	PRO	447	22.883	69.452	83.932	1.00
	10.06								
	ATOM	2086	O	PRO	447	21.989	70.096	83.348	1.00
	10.62								
	ATOM	2087	N	GLU	448	24.095	69.261	83.379	1.00
	9.60								
35	ATOM	2089	CA	GLU	448	24.435	69.741	82.037	1.00
	9.02								
	ATOM	2090	CB	GLU	448	25.922	69.533	81.737	1.00
	11.92								
40	ATOM	2091	CG	GLU	448	26.842	70.583	82.471	1.00
	14.25								
	ATOM	2092	CD	GLU	448	28.303	70.263	82.243	1.00
	17.10								
	ATOM	2093	OE1	GLU	448	28.746	69.091	82.455	1.00
	15.79								
45	ATOM	2094	OE2	GLU	448	29.014	71.173	81.795	1.00
	20.35								
	ATOM	2095	C	GLU	448	23.633	69.041	80.944	1.00
	8.80								
50	ATOM	2096	O	GLU	448	23.277	69.617	79.909	1.00
	7.80								
	ATOM	2097	N	VAL	449	23.446	67.733	81.115	1.00
	8.54								
	ATOM	2099	CA	VAL	449	22.674	66.953	80.127	1.00
	8.45								
55	ATOM	2100	CB	VAL	449	22.727	65.414	80.492	1.00
	7.43								
	ATOM	2101	CG1	VAL	449	21.663	64.624	79.728	1.00
	9.15								

	ATOM	2102	CG2	VAL	449	24.090	64.862	80.141	1.00
	11.63								
	ATOM	2103	C	VAL	449	21.218	67.497	80.157	1.00
	5.64								
5	ATOM	2104	O	VAL	449	20.650	67.845	79.138	1.00
	7.70								
	ATOM	2105	N	ILE	450	20.649	67.631	81.337	0.60
	2.91								
10	ATOM	2107	CA	ILE	450	19.274	68.141	81.460	0.60
	4.78								
	ATOM	2108	CB	ILE	450	18.870	68.177	82.962	0.60
	3.17								
	ATOM	2109	CG2	ILE	450	17.538	68.969	83.185	0.60
	4.56								
15	ATOM	2110	CG1	ILE	450	18.733	66.721	83.454	0.60
	3.56								
	ATOM	2111	CD1	ILE	450	18.783	66.570	84.923	0.60
	4.70								
20	ATOM	2112	C	ILE	450	19.061	69.514	80.798	0.60
	5.71								
	ATOM	2113	O	ILE	450	18.146	69.734	79.987	0.60
	2.44								
	ATOM	2114	N	GLN	451	20.027	70.377	81.055	1.00
	9.36								
25	ATOM	2116	CA	GLN	451	20.053	71.754	80.559	1.00
	14.03								
	ATOM	2117	CB	GLN	451	21.248	72.487	81.211	1.00
	19.90								
30	ATOM	2118	CG	GLN	451	21.416	73.981	80.917	1.00
	28.98								
	ATOM	2119	CD	GLN	451	22.705	74.544	81.557	1.00
	34.25								
	ATOM	2120	OE1	GLN	451	23.830	74.071	81.261	1.00
	36.31								
35	ATOM	2121	NE2	GLN	451	22.553	75.546	82.431	1.00
	36.66								
	ATOM	2124	C	GLN	451	20.166	71.714	79.049	1.00
	12.84								
40	ATOM	2125	O	GLN	451	19.441	72.402	78.335	1.00
	11.56								
	ATOM	2126	N	ASN	452	21.069	70.891	78.527	1.00
	11.36								
	ATOM	2128	CA	ASN	452	21.196	70.819	77.083	1.00
	10.00								
45	ATOM	2129	CB	ASN	452	22.424	70.010	76.693	1.00
	12.65								
	ATOM	2130	CG	ASN	452	23.683	70.865	76.564	1.00
	16.71								
50	ATOM	2131	OD1	ASN	452	24.578	70.539	75.787	1.00
	23.16								
	ATOM	2132	ND2	ASN	452	23.759	71.937	77.308	1.00
	18.51								
	ATOM	2135	C	ASN	452	19.917	70.251	76.435	1.00
	9.75								
55	ATOM	2136	O	ASN	452	19.387	70.768	75.401	1.00
	8.53								
	ATOM	2137	N	LEU	453	19.386	69.174	77.007	1.00
	9.20								

5	ATOM 8.71	2139	CA	LEU	453	18.160	68.612	76.436	1.00
	ATOM 9.28	2140	CB	LEU	453	17.687	67.411	77.236	1.00
	ATOM 9.86	2141	CG	LEU	453	18.624	66.186	77.152	1.00
	ATOM 7.88	2142	CD1	LEU	453	18.104	65.089	78.051	1.00
10	ATOM 11.07	2143	CD2	LEU	453	18.697	65.762	75.664	1.00
	ATOM 8.57	2144	C	LEU	453	17.046	69.650	76.404	1.00
	ATOM 10.42	2145	O	LEU	453	16.381	69.785	75.435	1.00
15	ATOM 11.11	2146	N	GLU	454	16.875	70.396	77.490	1.00
	ATOM 11.88	2148	CA	GLU	454	15.798	71.398	77.560	1.00
	ATOM 15.37	2149	CB	GLU	454	15.629	71.866	79.011	1.00
20	ATOM 18.92	2150	CG	GLU	454	15.194	70.672	79.903	1.00
	ATOM 23.60	2151	CD	GLU	454	14.980	70.997	81.371	1.00
	ATOM 26.49	2152	OE1	GLU	454	15.583	71.964	81.885	1.00
25	ATOM 25.97	2153	OE2	GLU	454	14.211	70.241	82.038	1.00
	ATOM 11.10	2154	C	GLU	454	15.913	72.548	76.534	1.00
	ATOM 12.14	2155	O	GLU	454	14.905	73.160	76.138	1.00
30	ATOM 9.92	2156	N	ARG	455	17.115	72.728	75.985	1.00
	ATOM 9.09	2158	CA	ARG	455	17.394	73.739	74.943	1.00
	ATOM 11.52	2159	CB	ARG	455	18.904	74.071	74.933	1.00
35	ATOM 13.92	2160	CG	ARG	455	19.385	74.722	76.196	1.00
	ATOM 15.24	2161	CD	ARG	455	20.793	75.252	76.049	1.00
	ATOM 12.95	2162	NE	ARG	455	20.845	76.406	75.150	1.00
40	ATOM 12.76	2164	CZ	ARG	455	21.958	77.079	74.862	1.00
	ATOM 11.45	2165	NH1	ARG	455	23.121	76.705	75.392	1.00
	ATOM 11.06	2168	NH2	ARG	455	21.906	78.149	74.069	1.00
45	ATOM 9.53	2171	C	ARG	455	17.070	73.160	73.571	1.00
	ATOM 11.25	2172	O	ARG	455	17.085	73.844	72.551	1.00
	ATOM 8.70	2173	N	GLY	456	16.808	71.853	73.529	1.00
55	ATOM 6.55	2175	CA	GLY	456	16.561	71.205	72.263	1.00

5	ATOM 5.96	2176	C	GLY	456	17.796	70.526	71.681	1.00
	ATOM 8.41	2177	O	GLY	456	17.750	70.047	70.562	1.00
	ATOM 7.30	2178	N	TYR	457	18.922	70.530	72.390	1.00
	ATOM 7.68	2180	CA	TYR	457	20.131	69.880	71.858	1.00
10	ATOM 7.52	2181	CB	TYR	457	21.401	70.324	72.579	1.00
	ATOM 9.01	2182	CG	TYR	457	21.840	71.776	72.424	1.00
	ATOM 10.16	2183	CD1	TYR	457	21.454	72.534	71.331	1.00
	ATOM 10.10	2184	CE1	TYR	457	21.989	73.844	71.097	1.00
15	ATOM 11.27	2185	CD2	TYR	457	22.751	72.319	73.310	1.00
	ATOM 12.24	2186	CE2	TYR	457	23.290	73.622	73.108	1.00
	ATOM 11.69	2187	CZ	TYR	457	22.897	74.360	71.996	1.00
	ATOM 10.39	2188	OH	TYR	457	23.426	75.627	71.811	1.00
20	ATOM 7.71	2190	C	TYR	457	20.004	68.416	72.217	1.00
	ATOM 5.65	2191	O	TYR	457	19.218	68.070	73.085	1.00
	ATOM 6.53	2192	N	ARG	458	20.804	67.586	71.565	1.00
	ATOM 7.08	2194	CA	ARG	458	20.848	66.148	71.900	1.00
25	ATOM 4.26	2195	CB	ARG	458	20.196	65.324	70.798	1.00
	ATOM 7.42	2196	CG	ARG	458	18.641	65.551	70.676	1.00
	ATOM 5.42	2197	CD	ARG	458	17.955	65.113	71.973	1.00
	ATOM 4.88	2198	NE	ARG	458	16.498	65.301	71.900	1.00
30	ATOM 9.16	2200	CZ	ARG	458	15.829	66.318	72.442	1.00
	ATOM 9.98	2201	NH1	ARG	458	16.486	67.283	73.103	1.00
	ATOM 5.17	2204	NH2	ARG	458	14.483	66.325	72.396	1.00
	ATOM 9.32	2207	C	ARG	458	22.343	65.863	71.951	1.00
35	ATOM 7.42	2208	O	ARG	458	23.171	66.756	71.695	1.00
	ATOM 8.38	2209	N	MET	459	22.705	64.617	72.272	1.00
	ATOM 8.96	2211	CA	MET	459	24.122	64.237	72.331	1.00
	ATOM 6.66	2212	CB	MET	459	24.260	62.724	72.596	1.00
40	ATOM 8.80	2213	CG	MET	459	25.577	62.369	73.205	1.00

	ATOM	2214	SD	MET	459	25.707	60.524	73.364	1.00
	9.21								
	ATOM	2215	CE	MET	459	24.390	60.196	74.315	1.00
	9.63								
5	ATOM	2216	C	MET	459	24.880	64.547	71.059	1.00
	7.14								
	ATOM	2217	O	MET	459	24.436	64.284	69.955	1.00
	7.18								
10	ATOM	2218	N	VAL	460	26.067	65.113	71.243	1.00
	8.38								
	ATOM	2220	CA	VAL	460	26.977	65.433	70.167	1.00
	10.29								
	ATOM	2221	CB	VAL	460	28.318	65.999	70.764	1.00
	13.33								
15	ATOM	2222	CG1	VAL	460	29.387	66.083	69.725	1.00
	12.10								
	ATOM	2223	CG2	VAL	460	28.070	67.394	71.423	1.00
	16.34								
20	ATOM	2224	C	VAL	460	27.275	64.124	69.428	1.00
	11.62								
	ATOM	2225	O	VAL	460	27.376	63.081	70.059	1.00
	13.62								
	ATOM	2226	N	ARG	461	27.414	64.195	68.108	1.00
	11.56								
25	ATOM	2228	CA	ARG	461	27.748	63.033	67.276	1.00
	14.53								
	ATOM	2229	CB	ARG	461	28.101	63.456	65.828	1.00
	14.99								
30	ATOM	2230	CG	ARG	461	26.963	64.094	65.000	1.00
	14.92								
	ATOM	2231	CD	ARG	461	27.431	64.655	63.638	1.00
	17.39								
	ATOM	2232	NE	ARG	461	26.286	64.991	62.776	1.00
	13.44								
35	ATOM	2234	CZ	ARG	461	25.599	66.141	62.785	1.00
	17.27								
	ATOM	2235	NH1	ARG	461	25.901	67.139	63.624	1.00
	15.13								
40	ATOM	2238	NH2	ARG	461	24.618	66.322	61.901	1.00
	12.90								
	ATOM	2241	C	ARG	461	28.994	62.358	67.822	1.00
	16.47								
	ATOM	2242	O	ARG	461	30.049	63.002	67.966	1.00
	15.87								
45	ATOM	2243	N	PRO	462	28.887	61.062	68.179	1.00
	14.68								
	ATOM	2244	CD	PRO	462	27.675	60.227	68.325	1.00
	15.13								
50	ATOM	2245	CA	PRO	462	30.075	60.385	68.697	1.00
	16.27								
	ATOM	2246	CB	PRO	462	29.536	58.998	69.123	1.00
	14.87								
	ATOM	2247	CG	PRO	462	28.058	59.285	69.459	1.00
	15.13								
55	ATOM	2248	C	PRO	462	31.118	60.275	67.600	1.00
	17.36								
	ATOM	2249	O	PRO	462	30.816	60.340	66.414	1.00
	14.94								

	ATOM	2250	N	ASP	463	32.380	60.214	68.025	1.00
	21.83								
	ATOM	2252	CA	ASP	463	33.503	60.072	67.108	1.00
	23.79								
5	ATOM	2253	CB	ASP	463	34.808	59.889	67.883	1.00
	27.14								
	ATOM	2254	CG	ASP	463	35.214	61.133	68.627	1.00
	31.66								
10	ATOM	2255	OD1	ASP	463	34.823	62.242	68.175	1.00
	32.60								
	ATOM	2256	OD2	ASP	463	35.918	60.996	69.662	1.00
	34.15								
	ATOM	2257	C	ASP	463	33.265	58.833	66.293	1.00
	24.03								
15	ATOM	2258	O	ASP	463	32.772	57.838	66.820	1.00
	25.01								
	ATOM	2259	N	ASN	464	33.574	58.926	65.003	1.00
	23.24								
20	ATOM	2261	CA	ASN	464	33.421	57.834	64.064	1.00
	24.48								
	ATOM	2262	CB	ASN	464	34.449	56.752	64.387	1.00
	29.50								
	ATOM	2263	CG	ASN	464	35.856	57.299	64.371	1.00
	30.61								
25	ATOM	2264	OD1	ASN	464	36.233	58.041	63.460	1.00
	33.47								
	ATOM	2265	ND2	ASN	464	36.594	57.036	65.416	1.00
	32.95								
30	ATOM	2268	C	ASN	464	32.023	57.235	63.914	1.00
	22.41								
	ATOM	2269	O	ASN	464	31.879	56.143	63.420	1.00
	24.37								
	ATOM	2270	N	CYS	465	30.991	57.933	64.375	1.00
	19.98								
35	ATOM	2272	CA	CYS	465	29.613	57.417	64.210	1.00
	19.12								
	ATOM	2273	CB	CYS	465	28.680	58.077	65.244	1.00
	18.06								
40	ATOM	2274	SG	CYS	465	26.961	57.543	65.229	1.00
	16.47								
	ATOM	2275	C	CYS	465	29.095	57.739	62.792	1.00
	17.54								
	ATOM	2276	O	CYS	465	29.175	58.877	62.353	1.00
	17.92								
45	ATOM	2277	N	PRO	466	28.613	56.723	62.037	1.00
	15.82								
	ATOM	2278	CD	PRO	466	28.607	55.275	62.326	1.00
	15.22								
50	ATOM	2279	CA	PRO	466	28.090	56.994	60.694	1.00
	14.66								
	ATOM	2280	CB	PRO	466	27.629	55.624	60.214	1.00
	15.65								
	ATOM	2281	CG	PRO	466	28.554	54.659	60.957	1.00
	16.18								
55	ATOM	2282	C	PRO	466	26.864	57.933	60.846	1.00
	14.65								
	ATOM	2283	O	PRO	466	26.012	57.759	61.757	1.00
	10.18								



	ATOM	2284	N	GLU	467	26.797	58.937	59.971	1.00
	11.67								
	ATOM	2286	CA	GLU	467	25.696	59.912	60.010	1.00
	10.18								
5	ATOM	2287	CB	GLU	467	25.910	60.972	58.915	1.00
	9.33								
	ATOM	2288	CG	GLU	467	24.920	62.171	59.002	1.00
	9.53								
10	ATOM	2289	CD	GLU	467	24.934	62.883	60.360	1.00
	9.62								
	ATOM	2290	OE1	GLU	467	25.913	62.769	61.119	1.00
	8.00								
	ATOM	2291	OE2	GLU	467	23.941	63.560	60.690	1.00
	11.06								
15	ATOM	2292	C	GLU	467	24.284	59.256	59.915	1.00
	7.67								
	ATOM	2293	O	GLU	467	23.358	59.649	60.633	1.00
	7.21								
20	ATOM	2294	N	GLU	468	24.136	58.199	59.122	0.51
	3.25								
	ATOM	2296	CA	GLU	468	22.835	57.497	59.036	0.51
	3.63								
	ATOM	2297	CB	GLU	468	22.901	56.340	58.038	0.51
	2.00								
25	ATOM	2298	CG	GLU	468	23.184	56.814	56.640	0.51
	3.78								
	ATOM	2299	CD	GLU	468	23.598	55.704	55.734	0.51
	5.17								
30	ATOM	2300	OE1	GLU	468	22.700	55.024	55.182	0.51
	3.58								
	ATOM	2301	OE2	GLU	468	24.826	55.518	55.577	0.51
	5.21								
	ATOM	2302	C	GLU	468	22.378	56.955	60.386	0.51
	2.00								
35	ATOM	2303	O	GLU	468	21.223	57.045	60.754	0.51
	2.00								
	ATOM	2304	N	LEU	469	23.326	56.408	61.142	1.00
	4.11								
40	ATOM	2306	CA	LEU	469	23.040	55.864	62.475	1.00
	5.94								
	ATOM	2307	CB	LEU	469	24.210	55.035	63.024	1.00
	8.41								
	ATOM	2308	CG	LEU	469	23.924	54.377	64.411	1.00
	9.32								
45	ATOM	2309	CD1	LEU	469	22.854	53.295	64.270	1.00
	9.52								
	ATOM	2310	CD2	LEU	469	25.225	53.755	64.965	1.00
	9.76								
50	ATOM	2311	C	LEU	469	22.741	56.996	63.456	1.00
	7.74								
	ATOM	2312	O	LEU	469	21.808	56.935	64.250	1.00
	8.18								
	ATOM	2313	N	TYR	470	23.528	58.079	63.376	1.00
	7.64								
55	ATOM	2315	CA	TYR	470	23.299	59.211	64.257	1.00
	6.10								
	ATOM	2316	CB	TYR	470	24.370	60.325	64.013	1.00
	7.72								

	ATOM	2317	CG	TYR	470	24.174	61.538	64.921	1.00
	6.53								
	ATOM	2318	CD1	TYR	470	24.304	61.421	66.298	1.00
	8.09								
5	ATOM	2319	CE1	TYR	470	24.154	62.522	67.136	1.00
	8.81								
	ATOM	2320	CD2	TYR	470	23.876	62.807	64.388	1.00
	7.03								
10	ATOM	2321	CE2	TYR	470	23.712	63.923	65.213	1.00
	6.75								
	ATOM	2322	CZ	TYR	470	23.857	63.782	66.587	1.00
	9.17								
	ATOM	2323	OH	TYR	470	23.757	64.879	67.455	1.00
	8.33								
15	ATOM	2325	C	TYR	470	21.879	59.764	63.976	1.00
	5.88								
	ATOM	2326	O	TYR	470	21.188	60.109	64.910	1.00
	8.89								
	ATOM	2327	N	GLN	471	21.464	59.905	62.704	1.00
	6.37								
20	ATOM	2329	CA	GLN	471	20.089	60.396	62.401	1.00
	5.98								
	ATOM	2330	CB	GLN	471	19.902	60.709	60.903	1.00
	7.06								
25	ATOM	2331	CG	GLN	471	20.667	62.016	60.488	1.00
	8.39								
	ATOM	2332	CD	GLN	471	20.303	63.192	61.403	1.00
	10.48								
30	ATOM	2333	OE1	GLN	471	19.102	63.454	61.641	1.00
	9.64								
	ATOM	2334	NE2	GLN	471	21.313	63.932	61.888	1.00
	8.49								
	ATOM	2337	C	GLN	471	19.023	59.381	62.912	1.00
	6.80								
35	ATOM	2338	O	GLN	471	17.924	59.746	63.251	1.00
	8.94								
	ATOM	2339	N	LEU	472	19.372	58.097	63.006	1.00
	7.17								
	ATOM	2341	CA	LEU	472	18.409	57.129	63.579	1.00
	6.73								
40	ATOM	2342	CB	LEU	472	18.837	55.684	63.305	1.00
	7.36								
	ATOM	2343	CG	LEU	472	17.751	54.633	63.568	1.00
	4.99								
45	ATOM	2344	CD1	LEU	472	16.608	54.835	62.580	1.00
	6.17								
	ATOM	2345	CD2	LEU	472	18.386	53.219	63.432	1.00
	5.99								
	ATOM	2346	C	LEU	472	18.296	57.380	65.105	1.00
	7.03								
50	ATOM	2347	O	LEU	472	17.217	57.333	65.696	1.00
	7.74								
	ATOM	2348	N	MET	473	19.418	57.672	65.765	1.00
	8.81								
55	ATOM	2350	CA	MET	473	19.375	57.957	67.205	1.00
	7.49								
	ATOM	2351	CB	MET	473	20.772	58.193	67.738	1.00
	6.97								

	ATOM	2352	CG	MET	473	21.833	57.105	67.411	1.00
	8.95								
	ATOM	2353	SD	MET	473	23.482	57.869	67.764	1.00
	9.18								
5	ATOM	2354	CE	MET	473	24.667	56.454	67.716	1.00
	6.33								
	ATOM	2355	C	MET	473	18.533	59.225	67.463	1.00
	7.22								
10	ATOM	2356	O	MET	473	17.774	59.310	68.434	1.00
	6.41								
	ATOM	2357	N	ARG	474	18.678	60.214	66.589	1.00
	5.53								
	ATOM	2359	CA	ARG	474	17.923	61.481	66.739	1.00
	8.24								
15	ATOM	2360	CB	ARG	474	18.260	62.503	65.609	1.00
	9.46								
	ATOM	2361	CG	ARG	474	19.713	62.862	65.471	1.00
	12.37								
	ATOM	2362	CD	ARG	474	20.229	63.720	66.655	1.00
20	19.09								
	ATOM	2363	NE	ARG	474	19.508	64.990	66.825	1.00
	20.33								
	ATOM	2365	CZ	ARG	474	20.060	66.126	67.244	1.00
	16.96								
25	ATOM	2366	NH1	ARG	474	21.372	66.206	67.494	1.00
	12.13								
	ATOM	2369	NH2	ARG	474	19.260	67.108	67.667	1.00
	16.09								
	ATOM	2372	C	ARG	474	16.415	61.194	66.676	1.00
30	8.17								
	ATOM	2373	O	ARG	474	15.665	61.824	67.401	1.00
	9.22								
	ATOM	2374	N	LEU	475	15.985	60.220	65.863	1.00
	6.83								
35	ATOM	2376	CA	LEU	475	14.522	59.853	65.826	1.00
	8.75								
	ATOM	2377	CB	LEU	475	14.148	58.791	64.774	1.00
	8.07								
	ATOM	2378	CG	LEU	475	14.378	59.002	63.303	1.00
40	12.69								
	ATOM	2379	CD1	LEU	475	13.634	57.895	62.566	1.00
	14.03								
	ATOM	2380	CD2	LEU	475	13.856	60.359	62.846	1.00
	13.04								
45	ATOM	2381	C	LEU	475	14.111	59.298	67.164	1.00
	8.19								
	ATOM	2382	O	LEU	475	12.992	59.568	67.637	1.00
	8.29								
	ATOM	2383	N	CYS	476	15.009	58.535	67.805	1.00
50	8.96								
	ATOM	2385	CA	CYS	476	14.702	58.001	69.132	1.00
	9.13								
	ATOM	2386	CB	CYS	476	15.797	57.005	69.593	1.00
	9.64								
55	ATOM	2387	SG	CYS	476	15.970	55.547	68.497	1.00
	10.31								
	ATOM	2388	C	CYS	476	14.593	59.093	70.173	1.00
	9.15								

	ATOM	2389	O	CYS	476	14.021	58.889	71.243	1.00
	8.58								
	ATOM	2390	N	TRP	477	15.245	60.241	69.909	1.00
	11.52								
5	ATOM	2392	CA	TRP	477	15.237	61.331	70.874	1.00
	11.66								
	ATOM	2393	CB	TRP	477	16.652	61.910	71.060	1.00
	10.91								
10	ATOM	2394	CG	TRP	477	17.729	60.905	71.477	1.00
	10.69								
	ATOM	2395	CD2	TRP	477	19.090	60.880	71.014	1.00
	8.06								
	ATOM	2396	CE2	TRP	477	19.706	59.737	71.582	1.00
	10.51								
15	ATOM	2397	CE3	TRP	477	19.849	61.715	70.169	1.00
	6.59								
	ATOM	2398	CD1	TRP	477	17.583	59.810	72.312	1.00
	7.36								
	ATOM	2399	NE1	TRP	477	18.759	59.116	72.367	1.00
	9.93								
20	ATOM	2401	CZ2	TRP	477	21.065	59.391	71.329	1.00
	8.71								
	ATOM	2402	CZ3	TRP	477	21.191	61.381	69.914	1.00
	7.45								
25	ATOM	2403	CH2	TRP	477	21.783	60.232	70.493	1.00
	8.83								
	ATOM	2404	C	TRP	477	14.251	62.466	70.550	1.00
	12.97								
	ATOM	2405	O	TRP	477	14.387	63.589	71.018	1.00
	12.53								
30	ATOM	2406	N	LYS	478	13.210	62.153	69.796	1.00
	15.35								
	ATOM	2408	CA	LYS	478	12.215	63.162	69.475	1.00
	14.26								
35	ATOM	2409	CB	LYS	478	11.233	62.647	68.415	1.00
	16.83								
	ATOM	2410	CG	LYS	478	11.865	62.697	67.038	1.00
	19.68								
	ATOM	2411	CD	LYS	478	10.898	62.366	65.969	1.00
	24.32								
40	ATOM	2412	CE	LYS	478	11.468	62.669	64.598	1.00
	24.58								
	ATOM	2413	NZ	LYS	478	11.720	64.104	64.481	1.00
	29.10								
45	ATOM	2417	C	LYS	478	11.555	63.619	70.739	1.00
	12.48								
	ATOM	2418	O	LYS	478	11.399	62.871	71.705	1.00
	11.24								
	ATOM	2419	N	GLU	479	11.335	64.926	70.818	1.00
	12.24								
50	ATOM	2421	CA	GLU	479	10.719	65.500	72.014	1.00
	13.61								
	ATOM	2422	CB	GLU	479	10.430	66.996	71.763	1.00
	16.26								
55	ATOM	2423	CG	GLU	479	9.854	67.725	72.953	1.00
	20.83								
	ATOM	2424	CD	GLU	479	10.848	67.847	74.081	1.00
	26.33								

	ATOM	2425	OE1	GLU	479	12.068	67.605	73.841	1.00
	27.22								
	ATOM	2426	OE2	GLU	479	10.415	68.188	75.210	1.00
	27.42								
5	ATOM	2427	C	GLU	479	9.419	64.788	72.399	1.00
	13.09								
	ATOM	2428	O	GLU	479	9.211	64.409	73.548	1.00
	13.68								
10	ATOM	2429	N	ARG	480	8.485	64.679	71.461	1.00
	12.69								
	ATOM	2431	CA	ARG	480	7.219	64.006	71.831	1.00
	15.85								
	ATOM	2432	CB	ARG	480	6.046	64.466	70.948	1.00
	16.94								
15	ATOM	2433	CG	ARG	480	5.859	65.995	70.946	1.00
	23.39								
	ATOM	2434	CD	ARG	480	4.530	66.365	70.332	1.00
	27.67								
	ATOM	2435	NE	ARG	480	4.493	66.092	68.904	1.00
20	33.64								
	ATOM	2437	CZ	ARG	480	3.398	65.729	68.234	1.00
	36.96								
	ATOM	2438	NH1	ARG	480	2.243	65.585	68.881	1.00
	38.79								
25	ATOM	2441	NH2	ARG	480	3.443	65.565	66.910	1.00
	35.83								
	ATOM	2444	C	ARG	480	7.376	62.500	71.731	1.00
	12.27								
30	ATOM	2445	O	ARG	480	7.801	61.997	70.723	1.00
	12.79								
	ATOM	2446	N	PRO	481	7.021	61.777	72.788	1.00
	11.66								
	ATOM	2447	CD	PRO	481	6.505	62.310	74.063	1.00
	12.06								
35	ATOM	2448	CA	PRO	481	7.124	60.311	72.817	1.00
	12.25								
	ATOM	2449	CB	PRO	481	6.349	59.943	74.090	1.00
	12.06								
	ATOM	2450	CG	PRO	481	6.596	61.112	74.988	1.00
40	12.05								
	ATOM	2451	C	PRO	481	6.467	59.690	71.595	1.00
	12.62								
	ATOM	2452	O	PRO	481	7.070	58.886	70.870	1.00
	10.95								
45	ATOM	2453	N	GLU	482	5.267	60.179	71.262	1.00
	13.13								
	ATOM	2455	CA	GLU	482	4.518	59.631	70.138	1.00
	15.42								
	ATOM	2456	CB	GLU	482	3.068	60.178	70.141	1.00
50	21.05								
	ATOM	2457	CG	GLU	482	2.960	61.678	69.884	1.00
	27.58								
	ATOM	2458	CD	GLU	482	2.981	62.568	71.132	1.00
	30.23								
55	ATOM	2459	OE1	GLU	482	3.405	62.151	72.254	1.00
	28.76								
	ATOM	2460	OE2	GLU	482	2.544	63.730	70.955	1.00
	32.94								

	ATOM 12.59	2461	C	GLU	482	5.175	59.766	68.767	1.00
	ATOM 10.03	2462	O	GLU	482	4.865	59.019	67.819	1.00
5	ATOM 13.06	2463	N	ASP	483	6.149	60.676	68.653	1.00
	ATOM 11.42	2465	CA	ASP	483	6.854	60.865	67.389	1.00
10	ATOM 14.02	2466	CB	ASP	483	7.410	62.289	67.257	1.00
	ATOM 19.29	2467	CG	ASP	483	6.303	63.353	67.128	1.00
	ATOM 18.01	2468	OD1	ASP	483	5.155	63.000	66.796	1.00
15	ATOM 18.98	2469	OD2	ASP	483	6.604	64.526	67.389	1.00
	ATOM 9.88	2470	C	ASP	483	8.019	59.913	67.212	1.00
20	ATOM 10.53	2471	O	ASP	483	8.552	59.772	66.108	1.00
	ATOM 8.99	2472	N	ARG	484	8.465	59.324	68.311	1.00
	ATOM 8.84	2474	CA	ARG	484	9.599	58.377	68.286	1.00
25	ATOM 9.56	2475	CB	ARG	484	10.047	58.081	69.714	1.00
	ATOM 6.73	2476	CG	ARG	484	10.416	59.331	70.509	1.00
30	ATOM 8.41	2477	CD	ARG	484	10.875	59.035	71.914	1.00
	ATOM 7.26	2478	NE	ARG	484	10.877	60.273	72.686	1.00
	ATOM 10.06	2480	CZ	ARG	484	10.694	60.357	74.003	1.00
35	ATOM 9.41	2481	NH1	ARG	484	10.524	59.253	74.736	1.00
	ATOM 7.76	2484	NH2	ARG	484	10.557	61.561	74.583	1.00
40	ATOM 9.79	2487	C	ARG	484	9.079	57.105	67.577	1.00
	ATOM 8.30	2488	O	ARG	484	7.927	56.744	67.719	1.00
	ATOM 8.28	2489	N	PRO	485	9.940	56.427	66.811	1.00
45	ATOM 7.46	2490	CD	PRO	485	11.404	56.680	66.780	1.00
	ATOM 8.60	2491	CA	PRO	485	9.582	55.219	66.057	1.00
50	ATOM 7.26	2492	CB	PRO	485	10.809	55.012	65.157	1.00
	ATOM 7.83	2493	CG	PRO	485	11.953	55.476	66.042	1.00
	ATOM 8.39	2494	C	PRO	485	9.312	54.001	66.905	1.00
55	ATOM 8.61	2495	O	PRO	485	9.562	53.983	68.104	1.00
	ATOM 10.14	2496	N	THR	486	8.751	52.978	66.267	1.00

5	ATOM 9.93	2498	CA	THR	486	8.525	51.716	66.975	1.00
	ATOM 11.71	2499	CB	THR	486	7.432	50.894	66.285	1.00
	ATOM 9.31	2500	OG1	THR	486	7.883	50.576	64.963	1.00
	ATOM 10.77	2502	CG2	THR	486	6.094	51.712	66.212	1.00
10	ATOM 9.76	2503	C	THR	486	9.821	50.891	66.906	1.00
	ATOM 9.57	2504	O	THR	486	10.720	51.106	66.036	1.00
	ATOM 8.81	2505	N	PHE	487	9.894	49.880	67.764	1.00
15	ATOM 9.30	2507	CA	PHE	487	11.043	49.002	67.758	1.00
	ATOM 7.15	2508	CB	PHE	487	11.124	48.168	69.050	1.00
	ATOM 6.74	2509	CG	PHE	487	11.748	48.908	70.162	1.00
20	ATOM 5.25	2510	CD1	PHE	487	13.118	49.181	70.141	1.00
	ATOM 6.74	2511	CD2	PHE	487	10.988	49.333	71.240	1.00
	ATOM 5.38	2512	CE1	PHE	487	13.716	49.878	71.224	1.00
25	ATOM 7.47	2513	CE2	PHE	487	11.561	50.015	72.281	1.00
	ATOM 7.99	2514	CZ	PHE	487	12.953	50.287	72.278	1.00
	ATOM 9.64	2515	C	PHE	487	11.083	48.182	66.505	1.00
30	ATOM 8.29	2516	O	PHE	487	12.155	47.935	65.950	1.00
	ATOM 11.10	2517	N	ASP	488	9.911	47.850	65.966	1.00
	ATOM 10.80	2519	CA	ASP	488	9.909	47.132	64.699	1.00
35	ATOM 17.60	2520	CB	ASP	488	8.510	46.673	64.306	1.00
	ATOM 22.53	2521	CG	ASP	488	8.565	45.552	63.286	1.00
	ATOM 26.33	2522	OD1	ASP	488	9.381	44.630	63.479	1.00
40	ATOM 25.89	2523	OD2	ASP	488	7.857	45.617	62.281	1.00
	ATOM 10.95	2524	C	ASP	488	10.504	48.007	63.566	1.00
	ATOM 9.83	2525	O	ASP	488	11.268	47.505	62.680	1.00
45	ATOM 7.53	2526	N	TYR	489	10.155	49.307	63.554	1.00
	ATOM 8.33	2528	CA	TYR	489	10.703	50.218	62.527	1.00
	ATOM 6.41	2529	CB	TYR	489	10.162	51.673	62.706	1.00
50	ATOM 12.54	2530	CG	TYR	489	10.787	52.671	61.761	1.00

5	ATOM 11.81	2531	CD1	TYR	489	10.319	52.830	60.467	1.00
	ATOM 12.33	2532	CE1	TYR	489	10.952	53.702	59.580	1.00
	ATOM 13.93	2533	CD2	TYR	489	11.918	53.433	62.155	1.00
	ATOM 12.86	2534	CE2	TYR	489	12.537	54.307	61.272	1.00
10	ATOM 12.57	2535	CZ	TYR	489	12.061	54.431	60.003	1.00
	ATOM 10.28	2536	OH	TYR	489	12.683	55.295	59.134	1.00
	ATOM 6.43	2538	C	TYR	489	12.250	50.223	62.661	1.00
	ATOM 9.95	2539	O	TYR	489	12.966	50.046	61.708	1.00
15	ATOM 9.44	2540	N	LEU	490	12.715	50.448	63.868	1.00
	ATOM 10.56	2542	CA	LEU	490	14.144	50.483	64.208	1.00
	ATOM 9.09	2543	CB	LEU	490	14.319	50.711	65.723	1.00
	ATOM 9.40	2544	CG	LEU	490	13.938	52.108	66.222	1.00
20	ATOM 10.17	2545	CD1	LEU	490	13.737	52.138	67.750	1.00
	ATOM 11.51	2546	CD2	LEU	490	15.035	53.094	65.804	1.00
	ATOM 9.22	2547	C	LEU	490	14.855	49.192	63.768	1.00
	ATOM 9.40	2548	O	LEU	490	15.841	49.242	63.113	1.00
25	ATOM 9.85	2549	N	ARG	491	14.278	48.035	64.074	1.00
	ATOM 8.29	2551	CA	ARG	491	14.891	46.758	63.686	1.00
	ATOM 8.09	2552	CB	ARG	491	14.014	45.575	64.163	1.00
	ATOM 9.21	2553	CG	ARG	491	14.557	44.214	63.601	1.00
30	ATOM 14.63	2554	CD	ARG	491	13.455	43.119	63.545	1.00
	ATOM 17.86	2555	NE	ARG	491	12.249	43.619	62.861	1.00
	ATOM 17.59	2557	CZ	ARG	491	12.054	43.689	61.541	1.00
	ATOM 18.87	2558	NH1	ARG	491	12.975	43.279	60.674	1.00
35	ATOM 16.93	2561	NH2	ARG	491	10.917	44.213	61.089	1.00
	ATOM 9.76	2564	C	ARG	491	15.078	46.682	62.175	1.00
	ATOM 10.85	2565	O	ARG	491	16.145	46.355	61.644	1.00
	ATOM 8.11	2566	N	SER	492	14.026	47.078	61.468	0.71
40	ATOM 6.86	2568	CA	SER	492	14.006	47.054	60.027	0.71



5	ATOM 7.55	2569	CB	SER	492	12.597	47.458	59.546	0.71
	ATOM 11.29	2570	OG	SER	492	12.518	47.367	58.156	0.71
	ATOM 7.68	2572	C	SER	492	15.050	47.977	59.406	0.71
	ATOM 3.32	2573	O	SER	492	15.724	47.620	58.456	0.71
10	ATOM 8.81	2574	N	VAL	493	15.155	49.204	59.912	1.00
	ATOM 10.14	2576	CA	VAL	493	16.151	50.128	59.343	1.00
	ATOM 9.81	2577	CB	VAL	493	16.023	51.549	59.943	1.00
15	ATOM 7.77	2578	CG1	VAL	493	17.238	52.441	59.508	1.00
	ATOM 8.92	2579	CG2	VAL	493	14.693	52.175	59.516	1.00
20	ATOM 8.53	2580	C	VAL	493	17.554	49.594	59.670	1.00
	ATOM 10.58	2581	O	VAL	493	18.448	49.650	58.842	1.00
	ATOM 9.18	2582	N	LEU	494	17.747	49.139	60.906	1.00
25	ATOM 9.12	2584	CA	LEU	494	19.058	48.622	61.318	1.00
	ATOM 9.94	2585	CB	LEU	494	19.096	48.364	62.816	1.00
30	ATOM 8.16	2586	CG	LEU	494	19.261	49.601	63.715	1.00
	ATOM 4.70	2587	CD1	LEU	494	18.790	49.288	65.090	1.00
	ATOM 2.75	2588	CD2	LEU	494	20.702	50.179	63.717	1.00
35	ATOM 11.22	2589	C	LEU	494	19.490	47.425	60.497	1.00
	ATOM 11.13	2590	O	LEU	494	20.683	47.290	60.169	1.00
40	ATOM 11.26	2591	N	GLU	495	18.539	46.541	60.144	1.00
	ATOM 11.66	2593	CA	GLU	495	18.878	45.407	59.279	1.00
	ATOM 13.61	2594	CB	GLU	495	17.679	44.444	59.133	1.00
45	ATOM 11.89	2595	CG	GLU	495	17.503	43.566	60.380	1.00
	ATOM 17.24	2596	CD	GLU	495	16.260	42.687	60.369	1.00
50	ATOM 18.35	2597	OE1	GLU	495	15.562	42.579	59.346	1.00
	ATOM 18.05	2598	OE2	GLU	495	15.955	42.113	61.429	1.00
	ATOM 11.87	2599	C	GLU	495	19.321	45.903	57.874	1.00
55	ATOM 11.52	2600	O	GLU	495	20.172	45.319	57.237	1.00
	ATOM 9.31	2601	N	ASP	496	18.661	46.934	57.362	1.00

	ATOM	2603	CA	ASP	496	19.032	47.490	56.081	1.00
	10.10								
	ATOM	2604	CB	ASP	496	18.012	48.585	55.663	1.00
	12.32								
5	ATOM	2605	CG	ASP	496	16.755	47.995	55.058	1.00
	16.14								
	ATOM	2606	OD1	ASP	496	16.753	46.774	54.763	1.00
	15.24								
	ATOM	2607	OD2	ASP	496	15.767	48.716	54.884	1.00
10	14.19								
	ATOM	2608	C	ASP	496	20.429	48.085	56.167	1.00
	10.00								
	ATOM	2609	O	ASP	496	21.251	47.896	55.286	1.00
	10.81								
15	ATOM	2610	N	PHE	497	20.722	48.775	57.268	1.00
	10.93								
	ATOM	2612	CA	PHE	497	22.039	49.389	57.412	1.00
	12.83								
	ATOM	2613	CB	PHE	497	22.131	50.120	58.753	1.00
20	12.07								
	ATOM	2614	CG	PHE	497	21.398	51.445	58.801	1.00
	9.10								
	ATOM	2615	CD1	PHE	497	20.706	51.925	57.697	1.00
	11.06								
25	ATOM	2616	CD2	PHE	497	21.452	52.221	59.957	1.00
	9.30								
	ATOM	2617	CE1	PHE	497	20.068	53.232	57.737	1.00
	11.14								
	ATOM	2618	CE2	PHE	497	20.836	53.481	60.012	1.00
30	10.69								
	ATOM	2619	CZ	PHE	497	20.148	53.981	58.893	1.00
	9.81								
	ATOM	2620	C	PHE	497	23.124	48.288	57.352	1.00
	16.73								
35	ATOM	2621	O	PHE	497	24.127	48.408	56.636	1.00
	14.67								
	ATOM	2622	N	PHE	498	22.847	47.184	58.053	1.00
	19.32								
	ATOM	2624	CA	PHE	498	23.738	46.021	58.150	1.00
40	24.72								
	ATOM	2625	CB	PHE	498	23.138	45.044	59.210	1.00
	28.15								
	ATOM	2626	CG	PHE	498	23.691	43.637	59.189	1.00
	29.02								
45	ATOM	2627	CD1	PHE	498	25.046	43.393	59.165	1.00
	32.59								
	ATOM	2628	CD2	PHE	498	22.824	42.549	59.274	1.00
	34.85								
	ATOM	2629	CE1	PHE	498	25.547	42.077	59.227	1.00
50	33.04								
	ATOM	2630	CE2	PHE	498	23.298	41.231	59.338	1.00
	32.20								
	ATOM	2631	CZ	PHE	498	24.670	41.003	59.313	1.00
	35.12								
55	ATOM	2632	C	PHE	498	23.914	45.348	56.797	1.00
	26.82								
	ATOM	2633	O	PHE	498	25.036	45.093	56.358	1.00
	27.45								

	ATOM	2634	N	THR	499	22.795	45.074	56.130	1.00
	28.64								
	ATOM	2636	CA	THR	499	22.820	44.387	54.844	1.00
	32.01								
5	ATOM	2637	CB	THR	499	21.409	43.887	54.410	1.00
	31.10								
	ATOM	2638	OG1	THR	499	20.471	44.961	54.452	1.00
	33.42								
10	ATOM	2640	CG2	THR	499	20.925	42.811	55.340	1.00
	32.06								
	ATOM	2641	C	THR	499	23.464	45.193	53.736	1.00
	34.11								
	ATOM	2642	O	THR	499	23.686	44.677	52.648	1.00
	36.15								
15	ATOM	2643	N	ALA	500	23.781	46.454	54.026	1.00
	35.54								
	ATOM	2645	CA	ALA	500	24.417	47.346	53.062	1.00
	37.58								
20	ATOM	2646	CB	ALA	500	23.808	48.744	53.152	1.00
	37.42								
	ATOM	2647	C	ALA	500	25.920	47.409	53.343	1.00
	38.52								
	ATOM	2648	O	ALA	500	26.746	47.377	52.411	1.00
	39.26								
25	ATOM	2649	N	THR	501	26.278	47.516	54.625	1.00
	37.64								
	ATOM	2651	CA	THR	501	27.684	47.556	55.016	1.00
	38.55								
30	ATOM	2652	CB	THR	501	27.898	48.237	56.416	1.00
	38.57								
	ATOM	2653	OG1	THR	501	27.373	47.410	57.466	1.00
	34.01								
	ATOM	2655	CG2	THR	501	27.241	49.626	56.465	1.00
	36.76								
35	ATOM	2656	C	THR	501	28.236	46.119	55.047	1.00
	39.81								
	ATOM	2657	O	THR	501	27.714	45.260	54.289	1.00
	40.00								
40	ATOM	2658	OT	THR	501	29.166	45.854	55.848	1.00
	40.98								
	ATOM	2659	OH2	TIP	1	21.607	29.808	74.673	1.00
	13.25								
	ATOM	2662	OH2	TIP	6	16.481	32.964	74.773	1.00
	8.18								
45	ATOM	2665	OH2	TIP	7	24.345	68.868	70.468	1.00
	8.60								
	ATOM	2668	OH2	TIP	8	3.800	16.878	94.895	1.00
	8.12								
50	ATOM	2671	OH2	TIP	9	18.122	62.115	79.618	1.00
	9.07								
	ATOM	2674	OH2	TIP	10	16.780	62.091	62.320	1.00
	17.42								
	ATOM	2677	OH2	TIP	11	25.046	50.597	80.016	1.00
	3.72								
55	ATOM	2680	OH2	TIP	12	26.577	31.808	75.342	1.00
	7.12								
	ATOM	2683	OH2	TIP	13	25.262	21.524	76.974	1.00
	7.12								

	ATOM	2686	OH2 TIP	14	3.750	51.832	76.137	1.00
	13.69							
	ATOM	2689	OH2 TIP	15	32.763	40.036	77.507	1.00
	22.70							
5	ATOM	2692	OH2 TIP	16	23.035	20.546	78.042	1.00
	13.17							
	ATOM	2695	OH2 TIP	17	7.604	53.997	63.857	1.00
	20.48							
10	ATOM	2698	OH2 TIP	18	28.104	56.401	74.609	1.00
	12.66							
	ATOM	2701	OH2 TIP	19	22.067	18.830	82.221	1.00
	13.82							
	ATOM	2704	OH2 TIP	20	13.310	34.312	76.774	1.00
	8.87							
15	ATOM	2707	OH2 TIP	21	7.119	57.296	104.332	1.00
	7.40							
	ATOM	2710	OH2 TIP	22	35.615	44.422	79.595	1.00
	21.54							
	ATOM	2713	OH2 TIP	23	8.611	65.581	68.778	1.00
20	13.66							
	ATOM	2716	OH2 TIP	24	22.334	28.244	79.140	1.00
	9.70							
	ATOM	2719	OH2 TIP	25	14.002	69.197	73.540	1.00
	21.31							
25	ATOM	2722	OH2 TIP	26	13.645	55.624	79.426	1.00
	11.16							
	ATOM	2725	OH2 TIP	27	4.291	54.619	67.027	1.00
	14.97							
	ATOM	2728	OH2 TIP	28	6.648	45.172	67.946	1.00
30	11.87							
	ATOM	2731	OH2 TIP	29	24.617	78.613	73.803	1.00
	7.20							
	ATOM	2734	OH2 TIP	30	30.105	59.806	72.375	1.00
	22.68							
35	ATOM	2737	OH2 TIP	31	25.906	23.633	78.474	1.00
	14.97							
	ATOM	2740	OH2 TIP	32	3.150	56.882	67.884	1.00
	18.06							
	ATOM	2743	OH2 TIP	33	6.452	52.073	70.077	1.00
40	23.60							
	ATOM	2746	OH2 TIP	34	25.999	70.637	71.770	1.00
	16.40							
	ATOM	2749	OH2 TIP	35	30.439	41.016	81.578	1.00
	8.11							
45	ATOM	2752	OH2 TIP	36	13.101	71.537	72.323	1.00
	14.42							
	ATOM	2755	OH2 TIP	37	29.388	17.926	80.825	1.00
	23.02							
	ATOM	2758	OH2 TIP	38	35.887	38.783	74.498	1.00
50	23.64							
	ATOM	2761	OH2 TIP	39	29.565	66.029	74.889	1.00
	20.03							
	ATOM	2764	OH2 TIP	40	16.396	52.686	84.622	1.00
	15.35							
55	ATOM	2767	OH2 TIP	41	4.038	43.999	85.648	1.00
	13.56							
	ATOM	2770	OH2 TIP	42	29.895	58.350	74.470	1.00
	12.85							

	ATOM	2773	OH2 TIP	43	16.006	20.021	80.032	1.00
	17.93							
	ATOM	2776	OH2 TIP	44	4.726	47.653	74.993	1.00
	23.30							
5	ATOM	2779	OH2 TIP	45	15.082	76.736	76.273	1.00
	14.21							
	ATOM	2782	OH2 TIP	46	6.212	59.954	101.185	1.00
	14.52							
10	ATOM	2785	OH2 TIP	47	14.038	45.946	83.586	1.00
	10.46							
	ATOM	2788	OH2 TIP	48	14.035	25.017	81.228	1.00
	29.03							
	ATOM	2791	OH2 TIP	49	10.652	40.732	67.376	1.00
	10.79							
15	ATOM	2794	OH2 TIP	50	33.261	42.026	62.917	1.00
	19.02							
	ATOM	2797	OH2 TIP	51	6.599	57.993	76.906	1.00
	15.26							
20	ATOM	2800	OH2 TIP	53	6.156	57.374	65.551	1.00
	27.15							
	ATOM	2803	OH2 TIP	54	17.644	53.001	80.698	1.00
	14.74							
	ATOM	2806	OH2 TIP	55	11.433	33.376	69.389	1.00
	22.38							
25	ATOM	2809	OH2 TIP	56	12.863	36.165	79.302	1.00
	28.40							
	ATOM	2812	OH2 TIP	57	39.996	43.532	77.556	1.00
	30.23							
30	ATOM	2815	OH2 TIP	58	3.108	18.092	92.566	1.00
	23.01							
	ATOM	2818	OH2 TIP	59	13.400	23.825	95.215	1.00
	15.83							
	ATOM	2821	OH2 TIP	60	12.144	38.120	66.081	1.00
	28.53							
35	ATOM	2824	OH2 TIP	61	24.488	67.388	74.369	1.00
	19.91							
	ATOM	2827	OH2 TIP	62	43.447	40.286	77.519	1.00
	23.20							
40	ATOM	2830	OH2 TIP	63	1.187	21.662	100.301	1.00
	25.85							
	ATOM	2833	OH2 TIP	64	11.268	66.563	68.304	1.00
	18.84							
	ATOM	2836	OH2 TIP	65	4.560	48.311	66.937	1.00
	30.17							
45	ATOM	2839	OH2 TIP	66	23.895	29.206	76.838	1.00
	21.66							
	ATOM	2842	OH2 TIP	67	13.775	73.914	73.721	1.00
	15.70							
	ATOM	2845	OH2 TIP	68	15.313	54.443	81.542	1.00
50	19.77							
	ATOM	2848	OH2 TIP	69	35.474	54.860	72.471	1.00
	31.09							
	ATOM	2851	OH2 TIP	70	25.667	52.892	57.948	1.00
	45.86							
55	ATOM	2854	OH2 TIP	71	14.679	45.561	56.799	1.00
	23.99							
	ATOM	2857	OH2 TIP	73	24.498	26.195	78.508	1.00
	45.19							

	ATOM	2860	OH2 TIP	74	17.843	34.155	99.866	1.00
	21.03							
	ATOM	2863	OH2 TIP	76	29.878	33.436	98.172	1.00
	51.49							
5	ATOM	2866	OH2 TIP	77	26.142	72.935	70.592	1.00
	14.89							
	ATOM	2869	OH2 TIP	78	12.087	33.784	80.125	1.00
	15.78							
10	ATOM	2872	OH2 TIP	79	29.070	62.498	72.146	1.00
	11.81							
	ATOM	2875	OH2 TIP	80	26.762	65.659	74.219	1.00
	15.76							
	ATOM	2878	OH2 TIP	81	27.244	19.850	78.029	1.00
	21.65							
15	ATOM	2881	OH2 TIP	82	29.140	36.797	82.374	1.00
	17.60							
	ATOM	2884	OH2 TIP	84	18.796	52.521	83.123	1.00
	18.72							
	ATOM	2887	OH2 TIP	85	27.251	24.541	94.370	1.00
20	25.70							
	ATOM	2890	OH2 TIP	86	-1.545	21.255	100.340	1.00
	17.73							
	ATOM	2893	OH2 TIP	87	15.837	35.644	101.482	1.00
	27.51							
25	ATOM	2896	OH2 TIP	88	34.284	38.018	76.564	1.00
	26.44							
	ATOM	2899	OH2 TIP	89	24.213	74.301	76.721	1.00
	26.05							
	ATOM	2902	OH2 TIP	90	13.037	22.464	79.577	1.00
30	20.22							
	ATOM	2905	OH2 TIP	91	9.767	52.390	79.457	1.00
	18.86							
	ATOM	2908	OH2 TIP	92	20.238	71.139	85.112	1.00
	19.98							
35	ATOM	2911	OH2 TIP	93	4.599	59.491	77.668	1.00
	22.03							
	ATOM	2914	OH2 TIP	94	10.448	58.867	64.309	1.00
	37.46							
	ATOM	2917	OH2 TIP	95	17.150	52.061	87.312	1.00
40	28.30							
	ATOM	2920	OH2 TIP	96	14.944	19.298	88.358	1.00
	23.01							
	ATOM	2923	OH2 TIP	98	22.606	31.977	72.585	1.00
	30.76							
45	ATOM	2926	OH2 TIP	99	16.389	46.097	85.748	1.00
	31.74							
	ATOM	2929	OH2 TIP	100	32.467	60.047	71.069	1.00
	22.28							
	ATOM	2932	OH2 TIP	101	12.570	44.846	99.291	1.00
50	24.56							
	ATOM	2935	OH2 TIP	102	15.465	38.546	102.263	1.00
	23.51							
	ATOM	2938	OH2 TIP	103	-2.147	21.190	94.409	1.00
	34.08							
55	ATOM	2941	OH2 TIP	104	23.412	43.123	93.986	1.00
	20.69							
	ATOM	2944	OH2 TIP	106	32.275	63.542	69.259	1.00
	35.11							

	ATOM	2947	OH2 TIP	109	27.641	29.169	75.550	1.00
	42.12							
	ATOM	2950	OH2 TIP	110	34.288	32.152	91.932	1.00
	35.49							
5	ATOM	2953	OH2 TIP	111	5.812	50.212	63.249	1.00
	19.89							
	ATOM	2956	OH2 TIP	112	8.168	28.072	92.374	1.00
	26.50							
10	ATOM	2959	OH2 TIP	114	11.901	21.456	95.373	1.00
	35.24							
	ATOM	2962	OH2 TIP	115	-5.840	20.011	93.287	1.00
	34.92							
	ATOM	2965	OH2 TIP	116	34.337	49.043	60.740	1.00
	24.03							
15	ATOM	2968	OH2 TIP	117	15.413	40.101	91.364	1.00
	15.29							
	ATOM	2971	OH2 TIP	119	13.005	30.660	72.127	1.00
	31.18							
	ATOM	2974	OH2 TIP	120	29.150	70.914	70.714	1.00
20	37.66							
	ATOM	2977	OH2 TIP	121	6.283	34.776	76.059	1.00
	18.99							
	ATOM	2980	OH2 TIP	122	26.184	75.068	74.889	1.00
	33.22							
25	ATOM	2983	OH2 TIP	123	40.357	38.872	69.510	1.00
	42.15							
	ATOM	2986	OH2 TIP	125	24.270	25.656	95.508	1.00
	23.81							
30	ATOM	2989	OH2 TIP	126	26.877	26.802	73.517	1.00
	25.85							
	ATOM	2992	OH2 TIP	127	34.779	35.873	70.723	1.00
	29.26							
	ATOM	2995	OH2 TIP	133	23.187	58.759	84.297	1.00
	26.34							
35	ATOM	2998	OH2 TIP	134	23.576	54.423	85.628	1.00
	37.02							
	ATOM	3001	OH2 TIP	136	19.455	59.322	89.181	1.00
	38.92							
	ATOM	3004	OH2 TIP	137	11.696	59.602	87.696	1.00
40	32.60							
	ATOM	3007	OH2 TIP	138	12.636	69.530	76.584	1.00
	37.94							
	ATOM	3010	OH2 TIP	140	26.613	28.113	77.816	1.00
	25.26							
45	ATOM	3013	OH2 TIP	142	27.818	61.288	62.778	1.00
	30.40							
	ATOM	3016	OH2 TIP	143	3.206	49.856	71.371	1.00
	42.17							
	ATOM	3019	OH2 TIP	146	2.534	52.633	67.963	1.00
50	43.02							
	ATOM	3022	OH2 TIP	147	25.577	46.460	95.088	1.00
	33.95							
	ATOM	3025	OH2 TIP	149	9.759	51.941	89.536	1.00
	35.56							
55	ATOM	3028	OH2 TIP	150	12.752	31.552	74.994	1.00
	27.35							
	ATOM	3031	OH2 TIP	151	12.093	29.315	75.972	1.00
	25.75							

	ATOM	3034	OH2 TIP	152	21.842	59.026	87.281	1.00
	31.48							
	ATOM	3037	OH2 TIP	153	11.270	44.335	57.695	1.00
	27.59							
5	ATOM	3040	OH2 TIP	154	14.539	59.954	88.025	1.00
	30.50							
	ATOM	3043	OH2 TIP	156	4.272	28.080	96.025	1.00
	47.65							
	ATOM	3046	OH2 TIP	157	17.859	42.053	92.196	1.00
10	29.57							
	ATOM	3049	OH2 TIP	158	22.647	41.349	83.263	1.00
	39.70							
	ATOM	3052	OH2 TIP	159	11.322	46.623	90.716	1.00
	31.92							
15	ATOM	3055	OH2 TIP	161	2.712	52.383	89.710	1.00
	33.22							
	ATOM	3058	OH2 TIP	162	1.287	52.867	87.116	1.00
	44.83							
	ATOM	3061	OH2 TIP	165	27.002	63.572	86.923	1.00
20	29.86							
	ATOM	3064	OH2 TIP	166	16.412	64.181	68.052	1.00
	15.25							
	ATOM	3067	OH2 TIP	167	6.518	17.919	94.625	1.00
	22.60							
25	ATOM	3070	OH2 TIP	168	3.236	56.796	74.190	1.00
	24.04							
	ATOM	3073	OH2 TIP	170	22.853	45.908	85.283	1.00
	31.68							
	ATOM	3076	OH2 TIP	171	23.845	31.720	74.930	1.00
30	24.61							
	ATOM	3079	OH2 TIP	173	12.173	62.934	61.143	1.00
	35.38							
	ATOM	3082	OH2 TIP	174	7.573	21.577	91.113	1.00
	25.92							
35	ATOM	3085	OH2 TIP	175	6.408	34.865	93.539	1.00
	25.00							
	ATOM	3088	OH2 TIP	176	6.879	44.086	90.136	1.00
	52.52							
	ATOM	3091	OH2 TIP	178	0.615	45.299	71.526	1.00
40	33.57							
	ATOM	3094	OH2 TIP	182	20.199	39.536	93.672	1.00
	32.42							
	ATOM	3097	OH2 TIP	183	-0.763	50.856	82.292	1.00
	42.39							
45	ATOM	3100	OH2 TIP	188	34.519	25.551	92.081	1.00
	43.60							
	ATOM	3103	OH2 TIP	189	33.409	56.361	79.281	1.00
	22.55							
	ATOM	3106	OH2 TIP	192	35.529	52.146	76.123	1.00
50	33.38							
	ATOM	3109	OH2 TIP	198	8.143	34.005	71.774	1.00
	35.46							
	ATOM	3112	OH2 TIP	205	11.395	37.978	80.175	1.00
	52.83							
55	ATOM	3115	OH2 TIP	206	13.568	38.792	104.153	1.00
	43.36							
	ATOM	3118	OH2 TIP	209	28.674	52.942	57.817	1.00
	43.27							



	ATOM	3121	OH2 TIP	210	27.341	25.580	77.094	1.00
	40.43							
	ATOM	3124	OH2 TIP	211	33.895	35.700	78.552	1.00
	31.26							
5	ATOM	3127	OH2 TIP	213	36.039	41.473	62.983	1.00
	36.60							
	ATOM	3130	OH2 TIP	215	3.114	32.257	85.950	1.00
	40.38							
10	ATOM	3133	OH2 TIP	216	29.196	19.501	86.311	1.00
	27.87							
	ATOM	3136	OH2 TIP	217	1.734	38.940	80.274	1.00
	29.80							
	ATOM	3139	OH2 TIP	218	13.815	67.086	76.838	1.00
	49.80							
15	ATOM	3142	OH2 TIP	219	6.229	43.091	87.714	1.00
	46.16							
	ATOM	3145	OH2 TIP	221	15.410	51.944	90.086	1.00
	36.89							
20	ATOM	3148	OH2 TIP	225	7.645	32.694	69.299	1.00
	49.48							
	ATOM	3151	OH2 TIP	232	38.235	43.952	79.309	1.00
	34.31							
	ATOM	3154	OH2 TIP	233	16.673	67.605	66.736	1.00
	42.44							
25	ATOM	3157	OH2 TIP	238	31.695	33.929	65.363	1.00
	37.59							
	ATOM	3160	OH2 TIP	239	39.136	48.319	75.756	1.00
	30.95							
30	ATOM	3163	OH2 TIP	246	13.766	42.285	91.193	1.00
	37.06							
	ATOM	3166	OH2 TIP	250	10.830	20.805	92.924	1.00
	42.77							
	ATOM	3169	OH2 TIP	253	15.397	18.714	83.768	1.00
	52.46							
35	ATOM	3172	OH2 TIP	904	20.775	41.091	87.469	1.00
	26.19							
	ATOM	3175	OH2 TIP	905	14.259	45.126	90.442	1.00
	33.83							
40	ATOM	3178	OH2 TIP	906	19.912	46.870	90.941	1.00
	32.08							
	ATOM	3181	OH2 TIP	907	19.475	44.746	88.140	1.00
	34.56							
	ATOM	3184	OH2 TIP	908	23.007	45.712	92.056	1.00
	27.28							
45	ATOM	3187	OH2 TIP	909	16.243	39.301	84.268	1.00
	13.29							
	ATOM	3190	OH2 TIP	910	30.673	39.068	83.162	1.00
	20.89							
	ATOM	3193	OH2 TIP	911	32.869	40.494	79.855	1.00
50	30.39							
	ATOM	3196	OH2 TIP	912	34.067	33.748	75.534	1.00
	31.62							
	ATOM	3199	S SO4	901	20.211	32.729	69.365	1.00
	11.83							
55	ATOM	3200	O1 SO4	901	19.917	32.055	70.576	1.00
	8.25							
	ATOM	3201	O2 SO4	901	18.988	33.154	68.793	1.00
	11.09							

	ATOM	3202	O3	SO4	901	21.079	33.859	69.664	1.00
	9.69								
	ATOM	3203	O4	SO4	901	20.891	31.903	68.483	1.00
	8.29								
5	ATOM	3204	S	SO4	902	39.416	37.847	73.393	1.00
	33.31								
	ATOM	3205	O1	SO4	902	38.532	36.720	73.276	1.00
	36.88								
10	ATOM	3206	O2	SO4	902	40.315	37.846	72.295	1.00
	30.80								
	ATOM	3207	O3	SO4	902	38.625	39.033	73.415	1.00
	32.33								
	ATOM	3208	O4	SO4	902	40.103	37.742	74.636	1.00
	30.64								
15	ATOM	3209	S	SO4	903	14.903	66.497	81.052	1.00
	45.64								
	ATOM	3210	O1	SO4	903	14.611	65.314	80.325	1.00
	45.40								
20	ATOM	3211	O2	SO4	903	13.851	67.466	80.876	1.00
	39.04								
	ATOM	3212	O3	SO4	903	15.056	66.123	82.449	1.00
	41.16								
	ATOM	3213	O4	SO4	903	16.087	67.039	80.513	1.00
	42.64								
25	ATOM	3214	C1	TES	1	25.406	37.409	83.740	1.00
	18.65								
	ATOM	3215	N2	TES	1	26.303	36.893	82.876	1.00
	17.59								
30	ATOM	3216	C3	TES	1	26.063	35.914	82.050	1.00
	16.60								
	ATOM	3217	N4	TES	1	24.789	35.339	82.066	1.00
	17.34								
	ATOM	3218	C5	TES	1	23.880	35.860	82.935	1.00
	17.94								
35	ATOM	3219	C6	TES	1	24.124	36.952	83.843	1.00
	19.34								
	ATOM	3220	C8	TES	1	23.433	37.629	84.848	1.00
	20.90								
40	ATOM	3221	N9	TES	1	24.295	38.548	85.351	1.00
	23.47								
	ATOM	3222	N10	TES	1	25.526	38.402	84.658	1.00
	20.41								
	ATOM	3223	C11	TES	1	22.064	37.416	85.360	1.00
	24.35								
45	ATOM	3224	C12	TES	1	21.559	36.094	85.645	1.00
	21.75								
	ATOM	3225	C13	TES	1	20.245	35.936	86.147	1.00
	19.80								
50	ATOM	3226	C14	TES	1	19.451	37.077	86.345	1.00
	21.04								
	ATOM	3227	C15	TES	1	19.913	38.376	86.105	1.00
	24.23								
	ATOM	3228	C16	TES	1	21.245	38.551	85.600	1.00
	24.86								
55	ATOM	3229	CL2	TES	1	17.843	36.693	86.919	1.00
	24.39								
	ATOM	3230	C22	TES	1	26.723	39.233	85.003	1.00
	21.28								

	ATOM	3231	C23	TES	1	27.086	40.186	83.849	1.00
	22.71								
	ATOM	3232	C27	TES	1	27.859	38.378	85.381	1.00
	19.02								
5	ATOM	3233	C31	TES	1	26.327	40.092	86.267	1.00
	20.75								
	ATOM	3234	N35	TES	1	22.684	35.170	82.804	1.00
	17.59								
10	ATOM	3235	H1	TES	1	24.169	39.201	86.141	1.00
	20.00								
	ATOM	3236	H2	TES	1	21.917	35.543	83.360	1.00
	20.00								
	ATOM	3237	H3	TES	1	22.707	34.421	82.235	1.00
	20.00								
15	END								

Table 2  
Coordinates of Lck bound with AMP-PNP

5	B	Atom				X	Y	Z	Occ
		Type	Res	#					
10	ATOM	1 CB	LYS	231		1.530	26.649	88.787	1.00
	37.83								
	ATOM	2 CG	LYS	231		0.717	26.584	87.564	1.00
15	37.44								
	ATOM	3 CD	LYS	231		1.283	25.595	86.606	1.00
	38.84								
20	ATOM	4 CE	LYS	231		0.371	25.484	85.401	1.00
	43.58								
	ATOM	5 NZ	LYS	231		0.880	24.421	84.468	1.00
25	44.98								
	ATOM	9 C	LYS	231		1.837	27.516	91.023	1.00
	35.81								
30	ATOM	10 O	LYS	231		2.856	28.159	91.228	1.00
	33.83								
	ATOM	13 N	LYS	231		1.192	29.091	89.212	1.00
35	39.11								
	ATOM	15 CA	LYS	231		1.048	27.708	89.771	1.00
	36.90								
40	ATOM	16 N	PRO	232		1.341	26.653	91.909	1.00
	35.23								
	ATOM	17 CD	PRO	232		0.047	25.938	91.884	1.00
45	36.98								
	ATOM	18 CA	PRO	232		2.077	26.404	93.149	1.00
	32.73								
50	ATOM	19 CB	PRO	232		1.147	25.423	93.888	1.00
	32.14								
	ATOM	20 CG	PRO	232		0.326	24.779	92.787	1.00
55	35.96								
	ATOM	21 C	PRO	232		3.482	25.814	92.739	1.00
	31.15								
60	ATOM	22 O	PRO	232		3.577	25.249	91.649	1.00
	27.60								
	ATOM	23 N	TRP	233		4.559	26.010	93.532	1.00
65	31.09								
	ATOM	25 CA	TRP	233		5.943	25.510	93.202	1.00
	30.95								
70	ATOM	26 CB	TRP	233		7.057	25.851	94.244	1.00
	28.05								
	ATOM	27 CG	TRP	233		6.983	25.142	95.538	1.00
75	25.65								
	ATOM	28 CD2	TRP	233		7.393	23.796	95.821	1.00
	24.06								
80	ATOM	29 CE2	TRP	233		7.102	23.557	97.170	1.00
	24.26								
	ATOM	30 CE3	TRP	233		7.972	22.773	95.049	1.00
85	21.80								
	ATOM	31 CD1	TRP	233		6.491	25.638	96.677	1.00
	26.39								
90	ATOM	32 NE1	TRP	233		6.552	24.700	97.673	1.00
	26.21								

5	ATOM 24.85	34	CZ2	TRP	233	7.361	22.322	97.800	1.00
	ATOM 20.36	35	CZ3	TRP	233	8.232	21.532	95.675	1.00
	ATOM 19.92	36	CH2	TRP	233	7.922	21.324	97.044	1.00
	ATOM 31.74	37	C	TRP	233	6.015	24.011	92.831	1.00
	ATOM 30.34	38	O	TRP	233	6.824	23.632	91.973	1.00
10	ATOM 33.48	39	N	TRP	234	5.101	23.199	93.409	1.00
	ATOM 33.75	41	CA	TRP	234	5.018	21.725	93.154	1.00
	ATOM 31.16	42	CB	TRP	234	4.216	20.921	94.207	1.00
15	ATOM 28.34	43	CG	TRP	234	2.776	21.333	94.488	1.00
	ATOM 26.29	44	CD2	TRP	234	2.398	22.201	95.524	1.00
	ATOM 26.45	45	CE2	TRP	234	0.986	22.293	95.534	1.00
	ATOM 26.00	46	CE3	TRP	234	3.139	22.935	96.456	1.00
20	ATOM 26.78	47	CD1	TRP	234	1.607	20.920	93.881	1.00
	ATOM 27.76	48	NE1	TRP	234	0.539	21.498	94.515	1.00
	ATOM 27.03	50	CZ2	TRP	234	0.295	23.095	96.450	1.00
25	ATOM 28.64	51	CZ3	TRP	234	2.474	23.722	97.353	1.00
	ATOM 27.62	52	CH2	TRP	234	1.051	23.802	97.354	1.00
	ATOM 34.53	53	C	TRP	234	4.401	21.432	91.833	1.00
30	ATOM 33.15	54	O	TRP	234	4.297	20.267	91.391	1.00
	ATOM 36.00	55	N	GLU	235	3.889	22.479	91.240	1.00
	ATOM 38.26	57	CA	GLU	235	3.290	22.335	89.953	1.00
35	ATOM 38.59	58	CB	GLU	235	1.819	22.698	90.017	1.00
	ATOM 39.84	59	CG	GLU	235	0.981	21.786	90.873	1.00
	ATOM 42.45	60	CD	GLU	235	-0.510	21.994	90.638	1.00
40	ATOM 42.87	61	OE1	GLU	235	-0.852	22.819	89.772	1.00
	ATOM 43.99	62	OE2	GLU	235	-1.345	21.334	91.302	1.00
	ATOM 39.64	63	C	GLU	235	4.016	23.215	88.938	1.00
45	ATOM 38.07	64	O	GLU	235	3.917	22.999	87.735	1.00
	ATOM 42.18	65	N	ASP	236	4.736	24.216	89.429	1.00

	ATOM	67	CA	ASP	236	5.441	25.112	88.536	1.00
	43.34								
	ATOM	68	CB	ASP	236	6.114	26.227	89.346	1.00
	45.25								
5	ATOM	69	CG	ASP	236	6.619	27.343	88.470	1.00
	47.09								
	ATOM	70	OD1	ASP	236	5.786	28.160	88.049	1.00
	52.49								
10	ATOM	71	OD2	ASP	236	7.821	27.369	88.144	1.00
	47.48								
	ATOM	72	C	ASP	236	6.478	24.368	87.662	1.00
	42.58								
	ATOM	73	O	ASP	236	7.409	23.729	88.171	1.00
	44.15								
15	ATOM	74	N	GLU	237	6.365	24.526	86.356	1.00
	38.06								
	ATOM	76	CA	GLU	237	7.300	23.894	85.439	1.00
	36.59								
20	ATOM	77	CB	GLU	237	6.800	24.046	84.009	1.00
	36.46								
	ATOM	78	CG	GLU	237	6.123	25.389	83.715	1.00
	43.75								
	ATOM	79	CD	GLU	237	4.751	25.561	84.434	1.00
	46.78								
25	ATOM	80	OE1	GLU	237	3.951	24.594	84.433	1.00
	47.53								
	ATOM	81	OE2	GLU	237	4.538	26.619	85.093	1.00
	47.26								
30	ATOM	82	C	GLU	237	8.765	24.357	85.526	1.00
	36.28								
	ATOM	83	O	GLU	237	9.645	23.675	85.022	1.00
	36.06								
	ATOM	84	N	TRP	238	9.022	25.506	86.153	1.00
	35.21								
35	ATOM	86	CA	TRP	238	10.378	26.006	86.255	1.00
	31.93								
	ATOM	87	CB	TRP	238	10.415	27.504	86.030	1.00
	28.95								
40	ATOM	88	CG	TRP	238	10.089	27.881	84.648	1.00
	24.79								
	ATOM	89	CD2	TRP	238	8.795	28.214	84.154	1.00
	25.38								
	ATOM	90	CE2	TRP	238	8.955	28.675	82.835	1.00
	26.85								
45	ATOM	91	CE3	TRP	238	7.518	28.167	84.703	1.00
	21.63								
	ATOM	92	CD1	TRP	238	10.963	28.112	83.628	1.00
	23.77								
	ATOM	93	NE1	TRP	238	10.297	28.600	82.543	1.00
50	26.71								
	ATOM	95	CZ2	TRP	238	7.884	29.088	82.060	1.00
	30.52								
	ATOM	96	CZ3	TRP	238	6.468	28.567	83.946	1.00
	26.61								
55	ATOM	97	CH2	TRP	238	6.639	29.024	82.633	1.00
	30.73								
	ATOM	98	C	TRP	238	11.090	25.653	87.544	1.00
	31.26								

	ATOM	99	O	TRP	238	12.303	25.692	87.607	1.00
	30.87								
	ATOM	100	N	GLU	239	10.341	25.230	88.553	1.00
	30.15								
5	ATOM	102	CA	GLU	239	10.937	24.880	89.825	1.00
	29.70								
	ATOM	103	CB	GLU	239	9.813	24.679	90.828	1.00
	31.38								
10	ATOM	104	CG	GLU	239	10.070	25.020	92.294	1.00
	38.59								
	ATOM	105	CD	GLU	239	10.220	26.411	92.781	1.00
	44.86								
	ATOM	106	OE1	GLU	239	10.022	27.301	92.330	1.00
	49.26								
15	ATOM	107	OE2	GLU	239	10.944	26.554	93.684	1.00
	46.75								
	ATOM	108	C	GLU	239	11.820	23.606	89.719	1.00
	29.69								
20	ATOM	109	O	GLU	239	11.423	22.617	89.105	1.00
	31.42								
	ATOM	110	N	VAL	240	13.029	23.667	90.268	1.00
	26.63								
	ATOM	112	CA	VAL	240	13.895	22.515	90.225	1.00
	24.23								
25	ATOM	113	CB	VAL	240	15.051	22.623	89.200	1.00
	24.53								
	ATOM	114	CG1	VAL	240	14.515	22.722	87.795	1.00
	22.09								
30	ATOM	115	CG2	VAL	240	16.014	23.755	89.573	1.00
	23.29								
	ATOM	116	C	VAL	240	14.536	22.314	91.560	1.00
	23.64								
	ATOM	117	O	VAL	240	14.713	23.257	92.343	1.00
	22.01								
35	ATOM	118	N	PRO	241	14.831	21.056	91.875	1.00
	22.17								
	ATOM	119	CD	PRO	241	14.386	19.838	91.140	1.00
	21.25								
40	ATOM	120	CA	PRO	241	15.470	20.731	93.144	1.00
	20.23								
	ATOM	121	CB	PRO	241	15.609	19.216	93.056	1.00
	19.32								
	ATOM	122	CG	PRO	241	14.392	18.797	92.217	1.00
	18.66								
45	ATOM	123	C	PRO	241	16.844	21.447	93.139	1.00
	21.05								
	ATOM	124	O	PRO	241	17.469	21.530	92.084	1.00
	20.90								
50	ATOM	125	N	ARG	242	17.309	21.945	94.280	1.00
	20.76								
	ATOM	127	CA	ARG	242	18.578	22.668	94.334	1.00
	23.13								
	ATOM	128	CB	ARG	242	18.785	23.378	95.671	1.00
	22.78								
55	ATOM	129	CG	ARG	242	19.866	24.477	95.614	1.00
	25.41								
	ATOM	130	CD	ARG	242	20.298	24.961	96.983	1.00
	27.06								

5	ATOM 33.41	131	NE	ARG	242	19.164	25.381	97.805	1.00
	ATOM 30.59	133	CZ	ARG	242	18.606	26.587	97.755	1.00
	ATOM 29.32	134	NH1	ARG	242	19.084	27.491	96.913	1.00
	ATOM 28.47	137	NH2	ARG	242	17.573	26.883	98.537	1.00
10	ATOM 25.38	140	C	ARG	242	19.771	21.756	94.062	1.00
	ATOM 24.61	141	O	ARG	242	20.826	22.221	93.588	1.00
	ATOM 25.40	142	N	GLU	243	19.579	20.460	94.289	1.00
15	ATOM 25.43	144	CA	GLU	243	20.616	19.463	94.059	1.00
	ATOM 27.61	145	CB	GLU	243	20.187	18.071	94.594	1.00
	ATOM 34.52	146	CG	GLU	243	20.021	17.995	96.094	1.00
20	ATOM 37.01	147	CD	GLU	243	18.757	18.664	96.591	1.00
	ATOM 35.85	148	OE1	GLU	243	17.840	18.855	95.774	1.00
	ATOM 41.46	149	OE2	GLU	243	18.673	18.959	97.802	1.00
25	ATOM 24.43	150	C	GLU	243	20.935	19.324	92.577	1.00
	ATOM 24.98	151	O	GLU	243	21.954	18.771	92.215	1.00
	ATOM 23.29	152	N	THR	244	20.064	19.801	91.708	1.00
30	ATOM 23.34	154	CA	THR	244	20.327	19.671	90.282	1.00
	ATOM 24.16	155	CB	THR	244	19.039	19.875	89.465	1.00
	ATOM 21.58	156	OG1	THR	244	18.630	21.238	89.603	1.00
35	ATOM 22.81	158	CG2	THR	244	17.915	18.920	89.940	1.00
	ATOM 21.94	159	C	THR	244	21.357	20.705	89.811	1.00
	ATOM 21.51	160	O	THR	244	21.788	20.701	88.666	1.00
40	ATOM 20.26	161	N	LEU	245	21.789	21.564	90.722	1.00
	ATOM 20.18	163	CA	LEU	245	22.690	22.632	90.349	1.00
	ATOM 18.93	164	CB	LEU	245	22.052	24.023	90.633	1.00
45	ATOM 16.80	165	CG	LEU	245	20.724	24.367	89.916	1.00
	ATOM 15.50	166	CD1	LEU	245	20.043	25.508	90.638	1.00
	ATOM 15.07	167	CD2	LEU	245	20.982	24.715	88.479	1.00
55	ATOM 21.46	168	C	LEU	245	24.036	22.623	91.016	1.00



5	ATOM 24.16	169	O	LEU	245	24.169	22.329	92.198	1.00
	ATOM 23.10	170	N	LYS	246	25.051	22.993	90.254	1.00
	ATOM 23.12	172	CA	LYS	246	26.392	23.085	90.808	1.00
	ATOM 24.89	173	CB	LYS	246	27.313	22.016	90.237	1.00
	ATOM 30.08	174	CG	LYS	246	28.652	22.045	90.899	1.00
10	ATOM 36.11	175	CD	LYS	246	29.686	21.303	90.095	1.00
	ATOM 40.50	176	CE	LYS	246	31.042	21.386	90.774	1.00
	ATOM 45.53	177	NZ	LYS	246	32.093	20.897	89.831	1.00
15	ATOM 22.14	181	C	LYS	246	26.934	24.456	90.410	1.00
	ATOM 23.00	182	O	LYS	246	27.057	24.716	89.224	1.00
	ATOM 20.92	183	N	LEU	247	27.241	25.324	91.381	0.60
	ATOM 18.66	185	CA	LEU	247	27.773	26.656	91.056	0.60
	ATOM 14.86	186	CB	LEU	247	27.342	27.740	92.060	0.60
20	ATOM 10.67	187	CG	LEU	247	25.951	27.816	92.744	0.60
	ATOM 11.61	188	CD1	LEU	247	25.806	29.118	93.471	0.60
	ATOM 10.00	189	CD2	LEU	247	24.758	27.644	91.820	0.60
25	ATOM 19.26	190	C	LEU	247	29.284	26.537	90.968	0.60
	ATOM 17.61	191	O	LEU	247	29.980	26.146	91.902	0.60
	ATOM 21.68	192	N	VAL	248	29.785	26.861	89.793	1.00
30	ATOM 25.27	194	CA	VAL	248	31.188	26.704	89.567	1.00
	ATOM 23.58	195	CB	VAL	248	31.398	25.950	88.256	1.00
	ATOM 25.11	196	CG1	VAL	248	32.861	25.815	87.968	1.00
35	ATOM 26.69	197	CG2	VAL	248	30.759	24.565	88.369	1.00
	ATOM 25.79	198	C	VAL	248	32.074	27.942	89.644	1.00
	ATOM 26.29	199	O	VAL	248	33.111	27.907	90.275	1.00
40	ATOM 27.89	200	N	GLU	249	31.646	29.054	89.079	1.00
	ATOM 27.88	202	CA	GLU	249	32.473	30.247	89.039	1.00
	ATOM 31.84	203	CB	GLU	249	33.126	30.296	87.632	1.00
45	ATOM 37.38	204	CG	GLU	249	33.990	31.504	87.319	1.00

5	ATOM 41.34	205	CD	GLU	249	34.481	31.683	85.847	1.00
	ATOM 43.62	206	OE1	GLU	249	34.082	31.024	84.840	1.00
	ATOM 44.93	207	OE2	GLU	249	35.291	32.617	85.738	1.00
	ATOM 28.46	208	C	GLU	249	31.600	31.510	89.332	1.00
10	ATOM 26.68	209	O	GLU	249	30.566	31.718	88.722	1.00
	ATOM 28.83	210	N	ARG	250	32.005	32.335	90.296	1.00
	ATOM 28.81	212	CA	ARG	250	31.226	33.534	90.635	1.00
15	ATOM 30.75	213	CB	ARG	250	31.476	33.970	92.113	1.00
	ATOM 35.96	214	CG	ARG	250	30.613	35.195	92.619	1.00
	ATOM 41.14	215	CD	ARG	250	31.015	35.934	93.982	1.00
20	ATOM 50.47	216	NE	ARG	250	32.500	35.855	94.222	1.00
	ATOM 53.39	218	CZ	ARG	250	33.085	35.446	95.148	1.00
	ATOM 55.04	219	NH1	ARG	250	32.207	35.230	95.611	1.00
25	ATOM 56.01	222	NH2	ARG	250	34.231	35.113	95.622	1.00
	ATOM 27.28	225	C	ARG	250	31.543	34.651	89.635	1.00
	ATOM 27.02	226	O	ARG	250	32.696	35.018	89.404	1.00
30	ATOM 24.93	227	N	LEU	251	30.514	35.114	88.953	1.00
	ATOM 24.60	229	CA	LEU	251	30.719	36.123	87.965	1.00
	ATOM 22.78	230	CB	LEU	251	29.761	35.937	86.754	1.00
35	ATOM 21.71	231	CG	LEU	251	29.636	34.579	85.991	1.00
	ATOM 22.72	232	CD1	LEU	251	28.622	34.418	84.848	1.00
	ATOM 20.58	233	CD2	LEU	251	31.012	34.340	85.428	1.00
40	ATOM 25.88	234	C	LEU	251	30.502	37.514	88.575	1.00
	ATOM 26.29	235	O	LEU	251	31.101	38.489	88.127	1.00
	ATOM 25.94	236	N	GLY	252	29.687	37.579	89.619	1.00
45	ATOM 25.27	238	CA	GLY	252	29.428	38.861	90.223	1.00
	ATOM 27.18	239	C	GLY	252	28.814	38.745	91.589	1.00
	ATOM 27.65	240	O	GLY	252	28.179	37.737	91.904	1.00
55	ATOM 26.87	241	N	ALA	253	29.132	39.722	92.433	1.00

5	ATOM 28.35	243	CA	ALA	253	28.619	39.799	93.789	1.00
	ATOM 28.60	244	CB	ALA	253	29.645	39.354	94.803	1.00
	ATOM 28.94	245	C	ALA	253	28.228	41.244	94.039	1.00
	ATOM 27.71	246	O	ALA	253	28.929	42.159	93.662	1.00
10	ATOM 30.03	247	N	GLY	254	27.070	41.433	94.651	1.00
	ATOM 27.78	249	CA	GLY	254	26.590	42.763	94.929	1.00
	ATOM 28.67	250	C	GLY	254	25.759	42.786	96.191	1.00
15	ATOM 27.16	251	O	GLY	254	25.642	41.805	96.946	1.00
	ATOM 30.78	252	N	GLN	255	25.172	43.944	96.404	1.00
20	ATOM 35.15	254	CA	GLN	255	24.330	44.191	97.568	1.00
	ATOM 35.64	255	CB	GLN	255	23.782	45.613	97.465	1.00
	ATOM 36.07	256	CG	GLN	255	23.052	46.111	98.684	1.00
25	ATOM 38.63	257	CD	GLN	255	22.563	47.548	98.502	1.00
	ATOM 36.80	258	OE1	GLN	255	22.941	48.261	97.544	1.00
30	ATOM 40.92	259	NE2	GLN	255	21.672	47.957	99.392	1.00
	ATOM 37.01	262	C	GLN	255	23.145	43.199	97.698	1.00
	ATOM 38.82	263	O	GLN	255	22.739	42.828	98.808	1.00
35	ATOM 35.08	264	N	PHE	256	22.618	42.734	96.575	1.00
	ATOM 34.39	266	CA	PHE	256	21.452	41.858	96.652	1.00
40	ATOM 33.93	267	CB	PHE	256	20.399	42.381	95.704	1.00
	ATOM 35.82	268	CG	PHE	256	20.120	43.841	95.887	1.00
	ATOM 37.69	269	CD1	PHE	256	19.590	44.310	97.084	1.00
45	ATOM 37.17	270	CD2	PHE	256	20.417	44.751	94.882	1.00
	ATOM 39.52	271	CE1	PHE	256	19.366	45.658	97.269	1.00
50	ATOM 37.23	272	CE2	PHE	256	20.190	46.117	95.065	1.00
	ATOM 38.55	273	CZ	PHE	256	19.668	46.569	96.253	1.00
	ATOM 35.30	274	C	PHE	256	21.690	40.393	96.391	1.00
55	ATOM 34.61	275	O	PHE	256	20.742	39.606	96.244	1.00
	ATOM 35.29	276	N	GLY	257	22.957	40.020	96.287	1.00

	ATOM	278	CA	GLY	257	23.243	38.632	96.046	1.00
	33.59								
	ATOM	279	C	GLY	257	24.363	38.465	95.062	1.00
	32.61								
5	ATOM	280	O	GLY	257	25.185	39.363	94.849	1.00
	33.22								
	ATOM	281	N	GLU	258	24.323	37.349	94.367	1.00
	30.90								
10	ATOM	283	CA	GLU	258	25.397	37.071	93.465	1.00
	29.26								
	ATOM	284	CB	GLU	258	26.401	36.157	94.173	1.00
	32.05								
	ATOM	285	CG	GLU	258	26.959	36.587	95.536	1.00
	37.52								
15	ATOM	286	CD	GLU	258	27.842	35.474	96.175	1.00
	41.31								
	ATOM	287	OE1	GLU	258	27.699	34.261	95.888	1.00
	44.11								
20	ATOM	288	OE2	GLU	258	28.717	35.811	96.976	1.00
	43.94								
	ATOM	289	C	GLU	258	24.958	36.383	92.171	1.00
	26.26								
	ATOM	290	O	GLU	258	23.794	35.968	92.045	1.00
	25.25								
25	ATOM	291	N	VAL	259	25.878	36.354	91.209	0.77
	22.42								
	ATOM	293	CA	VAL	259	25.746	35.693	89.893	0.77
	22.25								
30	ATOM	294	CB	VAL	259	25.768	36.645	88.669	0.77
	21.14								
	ATOM	295	CG1	VAL	259	25.740	35.819	87.320	0.77
	19.21								
	ATOM	296	CG2	VAL	259	24.592	37.543	88.746	0.77
	20.54								
35	ATOM	297	C	VAL	259	26.869	34.696	89.690	0.77
	21.14								
	ATOM	298	O	VAL	259	28.041	35.005	89.827	0.77
	19.78								
40	ATOM	299	N	TRP	260	26.429	33.502	89.315	1.00
	21.25								
	ATOM	301	CA	TRP	260	27.279	32.369	89.092	1.00
	20.50								
	ATOM	302	CB	TRP	260	26.947	31.368	90.160	1.00
	21.50								
45	ATOM	303	CG	TRP	260	27.438	31.859	91.376	1.00
	22.22								
	ATOM	304	CD2	TRP	260	28.564	31.372	92.069	1.00
	23.17								
50	ATOM	305	CE2	TRP	260	28.614	32.046	93.302	1.00
	23.80								
	ATOM	306	CE3	TRP	260	29.537	30.393	91.791	1.00
	24.27								
	ATOM	307	CD1	TRP	260	26.872	32.818	92.163	1.00
	24.11								
55	ATOM	308	NE1	TRP	260	27.573	32.931	93.336	1.00
	22.67								
	ATOM	310	CZ2	TRP	260	29.594	31.773	94.274	1.00
	27.01								

	ATOM	311	CZ3	TRP	260	30.514	30.117	92.748	1.00
	25.33								
	ATOM	312	CH2	TRP	260	30.541	30.804	93.988	1.00
	25.33								
5	ATOM	313	C	TRP	260	27.186	31.645	87.789	1.00
	20.66								
	ATOM	314	O	TRP	260	26.122	31.642	87.135	1.00
	17.41								
10	ATOM	315	N	MET	261	28.338	31.155	87.330	1.00
	22.38								
	ATOM	317	CA	MET	261	28.302	30.271	86.172	1.00
	22.42								
	ATOM	318	CB	MET	261	29.507	30.278	85.251	1.00
	24.52								
15	ATOM	319	CG	MET	261	29.443	29.097	84.252	1.00
	26.58								
	ATOM	320	SD	MET	261	30.476	27.739	84.446	1.00
	30.59								
20	ATOM	321	CE	MET	261	29.455	26.614	84.399	1.00
	32.94								
	ATOM	322	C	MET	261	28.214	28.899	86.802	1.00
	21.77								
	ATOM	323	O	MET	261	28.940	28.571	87.748	1.00
	22.16								
25	ATOM	324	N	GLY	262	27.242	28.150	86.320	1.00
	21.66								
	ATOM	326	CA	GLY	262	27.052	26.820	86.849	1.00
	17.56								
30	ATOM	327	C	GLY	262	26.566	25.840	85.828	1.00
	19.07								
	ATOM	328	O	GLY	262	26.451	26.139	84.634	1.00
	17.94								
	ATOM	329	N	TYR	263	26.303	24.646	86.348	1.00
	18.76								
35	ATOM	331	CA	TYR	263	25.796	23.497	85.560	1.00
	18.48								
	ATOM	332	CB	TYR	263	26.866	22.398	85.444	1.00
	16.81								
40	ATOM	333	CG	TYR	263	28.033	22.802	84.624	1.00
	19.76								
	ATOM	334	CD1	TYR	263	27.972	22.759	83.238	1.00
	19.56								
	ATOM	335	CE1	TYR	263	29.010	23.209	82.469	1.00
	23.28								
45	ATOM	336	CD2	TYR	263	29.175	23.295	85.223	1.00
	19.69								
	ATOM	337	CE2	TYR	263	30.247	23.745	84.467	1.00
	21.11								
50	ATOM	338	CZ	TYR	263	30.157	23.703	83.088	1.00
	23.30								
	ATOM	339	OH	TYR	263	31.184	24.173	82.298	1.00
	26.58								
	ATOM	341	C	TYR	263	24.531	22.867	86.172	1.00
	17.60								
55	ATOM	342	O	TYR	263	24.411	22.682	87.377	1.00
	16.26								
	ATOM	343	N	TYR	264	23.585	22.583	85.298	1.00
	20.34								

	ATOM	345	CA	TYR	264	22.347	21.915	85.695	1.00
	22.16								
	ATOM	346	CB	TYR	264	21.151	22.594	85.035	1.00
	21.31								
5	ATOM	347	CG	TYR	264	19.877	21.798	85.192	1.00
	23.68								
	ATOM	348	CD1	TYR	264	19.096	21.950	86.306	1.00
	20.71								
10	ATOM	349	CE1	TYR	264	17.928	21.188	86.481	1.00
	23.19								
	ATOM	350	CD2	TYR	264	19.486	20.866	84.226	1.00
	25.63								
	ATOM	351	CE2	TYR	264	18.327	20.092	84.386	1.00
	25.62								
15	ATOM	352	CZ	TYR	264	17.563	20.267	85.520	1.00
	24.58								
	ATOM	353	OH	TYR	264	16.414	19.531	85.714	1.00
	27.93								
	ATOM	355	C	TYR	264	22.483	20.458	85.193	1.00
20	20.81								
	ATOM	356	O	TYR	264	22.757	20.253	84.010	1.00
	18.48								
	ATOM	357	N	ASN	265	22.239	19.493	86.097	1.00
	21.28								
25	ATOM	359	CA	ASN	265	22.364	18.007	85.828	1.00
	21.74								
	ATOM	360	CB	ASN	265	21.200	17.448	85.009	1.00
	22.19								
30	ATOM	361	CG	ASN	265	19.870	17.305	85.774	1.00
	24.59								
	ATOM	362	OD1	ASN	265	19.729	17.368	86.984	1.00
	23.92								
	ATOM	363	ND2	ASN	265	18.837	17.117	84.962	1.00
	25.24								
35	ATOM	366	C	ASN	265	23.678	17.680	85.114	1.00
	18.48								
	ATOM	367	O	ASN	265	23.726	16.939	84.110	1.00
	19.13								
40	ATOM	368	N	GLY	266	24.712	18.282	85.692	1.00
	16.90								
	ATOM	370	CA	GLY	266	26.101	18.152	85.289	1.00
	13.15								
	ATOM	371	C	GLY	266	26.539	18.642	83.944	1.00
	11.08								
45	ATOM	372	O	GLY	266	27.651	19.128	83.813	1.00
	16.72								
	ATOM	373	N	HIS	267	25.661	18.613	82.964	0.49
	8.78								
50	ATOM	375	CA	HIS	267	26.045	18.997	81.629	0.49
	8.54								
	ATOM	376	CB	HIS	267	25.636	17.878	80.655	0.49
	7.49								
	ATOM	377	CG	HIS	267	26.316	16.573	80.920	0.49
	6.75								
55	ATOM	378	CD2	HIS	267	27.618	16.222	80.867	0.49
	6.15								
	ATOM	379	ND1	HIS	267	25.626	15.438	81.294	0.49
	5.87								

	ATOM 6.87	381	CE1	HIS	267	26.479	14.441	81.449	0.49
	ATOM 9.37	382	NE2	HIS	267	27.692	14.892	81.202	0.49
5	ATOM 10.78	384	C	HIS	267	25.592	20.337	81.061	0.49
	ATOM 6.89	385	O	HIS	267	26.192	20.829	80.109	0.49
10	ATOM 15.33	386	N	THR	268	24.576	20.949	81.652	1.00
	ATOM 19.30	388	CA	THR	268	24.031	22.195	81.098	1.00
	ATOM 22.06	389	CB	THR	268	22.481	22.144	81.017	1.00
15	ATOM 20.10	390	OG1	THR	268	22.131	20.956	80.294	1.00
	ATOM 18.68	392	CG2	THR	268	21.922	23.393	80.235	1.00
20	ATOM 16.30	393	C	THR	268	24.486	23.467	81.759	1.00
	ATOM 15.99	394	O	THR	268	24.114	23.738	82.876	1.00
	ATOM 16.63	395	N	LYS	269	25.315	24.197	81.034	1.00
25	ATOM 19.51	397	CA	LYS	269	25.886	25.461	81.521	1.00
	ATOM 19.25	398	CB	LYS	269	27.043	25.966	80.594	1.00
30	ATOM 23.75	399	CG	LYS	269	28.043	27.034	81.191	1.00
	ATOM 26.70	400	CD	LYS	269	29.474	26.916	80.493	1.00
	ATOM 31.11	401	CE	LYS	269	30.463	28.100	80.604	1.00
35	ATOM 32.76	402	NZ	LYS	269	31.737	27.815	79.807	1.00
	ATOM 16.84	406	C	LYS	269	24.772	26.489	81.643	1.00
40	ATOM 15.56	407	O	LYS	269	23.996	26.713	80.736	1.00
	ATOM 16.32	408	N	VAL	270	24.657	27.044	82.842	1.00
	ATOM 16.17	410	CA	VAL	270	23.629	28.040	83.104	1.00
45	ATOM 14.53	411	CB	VAL	270	22.429	27.383	83.834	1.00
	ATOM 14.57	412	CG1	VAL	270	21.785	26.336	82.951	1.00
50	ATOM 12.27	413	CG2	VAL	270	22.898	26.770	85.156	1.00
	ATOM 16.24	414	C	VAL	270	24.148	29.162	84.005	1.00
	ATOM 14.64	415	O	VAL	270	25.216	29.036	84.615	1.00
55	ATOM 16.15	416	N	ALA	271	23.411	30.271	84.052	1.00
	ATOM 17.09	418	CA	ALA	271	23.758	31.380	84.957	1.00

	ATOM	419	CB	ALA	271	23.518	32.713	84.259	1.00
	16.89								
	ATOM	420	C	ALA	271	22.852	31.261	86.171	1.00
	15.23								
5	ATOM	421	O	ALA	271	21.674	30.947	85.996	1.00
	15.43								
	ATOM	422	N	VAL	272	23.359	31.494	87.391	1.00
	16.62								
10	ATOM	424	CA	VAL	272	22.554	31.406	88.606	1.00
	17.94								
	ATOM	425	CB	VAL	272	22.975	30.235	89.532	1.00
	17.38								
	ATOM	426	CG1	VAL	272	22.120	30.200	90.800	1.00
	13.54								
15	ATOM	427	CG2	VAL	272	22.887	28.925	88.771	1.00
	18.41								
	ATOM	428	C	VAL	272	22.630	32.686	89.422	1.00
	20.75								
	ATOM	429	O	VAL	272	23.697	33.090	89.885	1.00
	22.07								
20	ATOM	430	N	LYS	273	21.497	33.335	89.600	1.00
	22.94								
	ATOM	432	CA	LYS	273	21.501	34.571	90.378	1.00
	23.64								
25	ATOM	433	CB	LYS	273	20.729	35.642	89.606	1.00
	24.86								
	ATOM	434	CG	LYS	273	20.744	37.112	90.077	1.00
	30.01								
30	ATOM	435	CD	LYS	273	19.453	37.572	89.439	1.00
	34.96								
	ATOM	436	CE	LYS	273	19.213	38.982	89.008	1.00
	36.43								
	ATOM	437	NZ	LYS	273	17.744	38.858	88.903	1.00
	42.94								
35	ATOM	441	C	LYS	273	20.855	34.209	91.695	1.00
	20.45								
	ATOM	442	O	LYS	273	19.780	33.648	91.711	1.00
	20.86								
40	ATOM	443	N	SER	274	21.529	34.514	92.791	0.65
	18.76								
	ATOM	445	CA	SER	274	21.021	34.171	94.098	0.65
	19.42								
	ATOM	446	CB	SER	274	22.065	33.395	94.881	0.65
	21.93								
45	ATOM	447	OG	SER	274	23.236	34.180	95.068	0.65
	27.20								
	ATOM	449	C	SER	274	20.678	35.410	94.865	0.65
	21.38								
50	ATOM	450	O	SER	274	21.346	36.432	94.773	0.65
	19.86								
	ATOM	451	N	LEU	275	19.683	35.281	95.719	1.00
	25.45								
	ATOM	453	CA	LEU	275	19.254	36.416	96.476	1.00
	27.40								
55	ATOM	454	CB	LEU	275	17.711	36.464	96.564	1.00
	27.49								
	ATOM	455	CG	LEU	275	16.867	37.412	97.463	1.00
	28.09								



	ATOM 25.93	456	CD1	LEU	275	16.942	38.885	97.101	1.00
	ATOM 27.55	457	CD2	LEU	275	15.416	36.936	97.377	1.00
5	ATOM 27.78	458	C	LEU	275	19.907	36.445	97.833	1.00
	ATOM 29.52	459	O	LEU	275	19.924	35.448	98.541	1.00
10	ATOM 29.98	460	N	LYS	276	20.457	37.600	98.179	1.00
	ATOM 32.68	462	CA	LYS	276	21.077	37.802	99.476	1.00
	ATOM 33.96	463	CB	LYS	276	21.982	39.031	99.481	1.00
15	ATOM 36.49	464	CG	LYS	276	22.616	39.278	100.832	1.00
	ATOM 42.22	465	CD	LYS	276	23.659	40.320	100.731	1.00
20	ATOM 47.21	466	CE	LYS	276	24.215	40.606	102.123	1.00
	ATOM 51.35	467	NZ	LYS	276	25.344	41.588	102.053	1.00
	ATOM 32.85	471	C	LYS	276	19.979	37.963	100.515	1.00
25	ATOM 33.52	472	O	LYS	276	19.207	38.917	100.458	1.00
	ATOM 34.58	473	N	ALA	277	19.946	37.078	101.504	1.00
30	ATOM 34.05	475	CA	ALA	277	18.855	37.188	102.460	1.00
	ATOM 35.34	476	CB	ALA	277	18.590	35.935	103.315	1.00
	ATOM 34.04	477	C	ALA	277	18.837	38.420	103.250	1.00
35	ATOM 38.07	478	O	ALA	277	19.822	38.880	103.840	1.00
	ATOM 32.76	479	N	GLY	278	17.657	38.987	103.145	1.00
40	ATOM 30.78	481	CA	GLY	278	17.389	40.217	103.795	1.00
	ATOM 30.85	482	C	GLY	278	17.837	41.403	102.975	1.00
	ATOM 31.24	483	O	GLY	278	17.515	42.505	103.365	1.00
45	ATOM 29.47	484	N	SER	279	18.526	41.242	101.852	1.00
	ATOM 28.75	486	CA	SER	279	18.926	42.435	101.139	1.00
50	ATOM 27.18	487	CB	SER	279	19.994	42.091	100.127	1.00
	ATOM 23.79	488	OG	SER	279	19.457	41.248	99.136	1.00
	ATOM 30.73	490	C	SER	279	17.741	43.107	100.434	1.00
55	ATOM 33.17	491	O	SER	279	17.805	44.300	100.089	1.00
	ATOM 27.39	492	N	MET	280	16.697	42.325	100.140	1.00

	ATOM	494	CA	MET	280	15.542	42.858	99.442	1.00
	23.62								
	ATOM	495	CB	MET	280	15.864	43.127	97.984	1.00
	24.43								
5	ATOM	496	CG	MET	280	16.214	41.890	97.209	1.00
	23.94								
	ATOM	497	SD	MET	280	16.460	42.155	95.478	1.00
	28.79								
10	ATOM	498	CE	MET	280	14.806	42.233	94.886	1.00
	23.16								
	ATOM	499	C	MET	280	14.446	41.837	99.528	1.00
	23.80								
	ATOM	500	O	MET	280	14.652	40.717	100.010	1.00
	24.10								
15	ATOM	501	N	SER	281	13.269	42.198	99.030	1.00
	22.93								
	ATOM	503	CA	SER	281	12.151	41.289	99.102	1.00
	20.64								
20	ATOM	504	CB	SER	281	10.853	41.981	98.725	1.00
	21.35								
	ATOM	505	OG	SER	281	9.789	41.050	98.602	1.00
	21.47								
	ATOM	507	C	SER	281	12.275	40.068	98.223	1.00
	18.82								
25	ATOM	508	O	SER	281	12.547	40.172	97.032	1.00
	20.53								
	ATOM	509	N	PRO	282	12.106	38.907	98.828	0.51
	14.57								
30	ATOM	510	CD	PRO	282	12.078	38.605	100.266	0.51
	13.40								
	ATOM	511	CA	PRO	282	12.195	37.703	98.034	0.51
	12.57								
	ATOM	512	CB	PRO	282	12.245	36.600	99.092	0.51
	11.19								
35	ATOM	513	CG	PRO	282	11.579	37.204	100.266	0.51
	10.35								
	ATOM	514	C	PRO	282	10.992	37.691	97.044	0.51
	13.41								
40	ATOM	515	O	PRO	282	11.091	37.097	95.979	0.51
	9.01								
	ATOM	516	N	ASP	283	9.903	38.442	97.324	1.00
	18.15								
	ATOM	518	CA	ASP	283	8.762	38.551	96.392	1.00
	17.76								
45	ATOM	519	CB	ASP	283	7.525	39.193	97.049	1.00
	22.85								
	ATOM	520	CG	ASP	283	6.351	39.362	96.061	1.00
	26.42								
50	ATOM	521	OD1	ASP	283	5.871	38.330	95.582	1.00
	29.45								
	ATOM	522	OD2	ASP	283	5.942	40.486	95.723	1.00
	27.03								
	ATOM	523	C	ASP	283	9.170	39.388	95.208	1.00
	18.60								
55	ATOM	524	O	ASP	283	8.874	39.069	94.056	1.00
	17.98								
	ATOM	525	N	ALA	284	9.882	40.483	95.495	1.00
	19.23								

5	ATOM 20.69	527	CA	ALA	284	10.369	41.385	94.446	1.00
	ATOM 18.76	528	CB	ALA	284	10.904	42.671	95.096	1.00
	ATOM 19.76	529	C	ALA	284	11.474	40.702	93.642	1.00
	ATOM 21.88	530	O	ALA	284	11.659	40.978	92.463	1.00
10	ATOM 21.00	531	N	PHE	285	12.256	39.869	94.296	1.00
	ATOM 19.86	533	CA	PHE	285	13.304	39.153	93.568	1.00
	ATOM 21.58	534	CB	PHE	285	14.156	38.362	94.576	1.00
15	ATOM 21.81	535	CG	PHE	285	15.271	37.599	93.938	1.00
	ATOM 21.74	536	CD1	PHE	285	16.415	38.254	93.505	1.00
20	ATOM 20.96	537	CD2	PHE	285	15.188	36.219	93.807	1.00
	ATOM 25.30	538	CE1	PHE	285	17.485	37.517	92.945	1.00
	ATOM 19.10	539	CE2	PHE	285	16.225	35.459	93.260	1.00
25	ATOM 23.29	540	CZ	PHE	285	17.382	36.100	92.823	1.00
	ATOM 19.96	541	C	PHE	285	12.627	38.204	92.574	1.00
30	ATOM 19.45	542	O	PHE	285	12.892	38.261	91.367	1.00
	ATOM 17.20	543	N	LEU	286	11.662	37.418	93.051	1.00
	ATOM 17.90	545	CA	LEU	286	11.009	36.439	92.166	1.00
35	ATOM 19.19	546	CB	LEU	286	10.276	35.373	92.997	1.00
	ATOM 19.01	547	CG	LEU	286	11.177	34.438	93.824	1.00
40	ATOM 18.18	548	CD1	LEU	286	10.332	33.564	94.734	1.00
	ATOM 20.50	549	CD2	LEU	286	11.998	33.593	92.853	1.00
	ATOM 18.94	550	C	LEU	286	10.095	37.006	91.112	1.00
45	ATOM 18.97	551	O	LEU	286	9.796	36.344	90.095	1.00
	ATOM 20.47	552	N	ALA	287	9.588	38.217	91.340	1.00
50	ATOM 19.43	554	CA	ALA	287	8.729	38.846	90.353	1.00
	ATOM 21.51	555	CB	ALA	287	8.328	40.262	90.816	1.00
	ATOM 19.24	556	C	ALA	287	9.406	38.916	88.981	1.00
55	ATOM 21.16	557	O	ALA	287	8.761	38.846	87.945	1.00
	ATOM 21.50	558	N	GLU	288	10.713	39.052	88.974	1.00

	ATOM	560	CA	GLU	288	11.430	39.108	87.711	1.00
	21.69								
	ATOM	561	CB	GLU	288	12.918	39.398	87.932	1.00
	20.35								
5	ATOM	562	CG	GLU	288	13.645	39.463	86.597	1.00
	20.74								
	ATOM	563	CD	GLU	288	15.132	39.628	86.723	1.00
	20.43								
10	ATOM	564	OE1	GLU	288	15.674	39.496	87.832	1.00
	21.79								
	ATOM	565	OE2	GLU	288	15.744	39.903	85.689	1.00
	25.80								
	ATOM	566	C	GLU	288	11.289	37.771	86.982	1.00
	21.41								
15	ATOM	567	O	GLU	288	11.076	37.738	85.775	1.00
	19.82								
	ATOM	568	N	ALA	289	11.425	36.672	87.720	1.00
	23.03								
	ATOM	570	CA	ALA	289	11.298	35.339	87.103	1.00
20	26.06								
	ATOM	571	CB	ALA	289	11.664	34.239	88.119	1.00
	25.97								
	ATOM	572	C	ALA	289	9.851	35.144	86.582	1.00
	26.33								
25	ATOM	573	O	ALA	289	9.638	34.651	85.467	1.00
	24.08								
	ATOM	574	N	ASN	290	8.866	35.549	87.372	1.00
	26.78								
30	ATOM	576	CA	ASN	290	7.483	35.426	86.911	1.00
	28.16								
	ATOM	577	CB	ASN	290	6.521	35.896	87.992	1.00
	31.30								
	ATOM	578	CG	ASN	290	6.545	34.976	89.195	1.00
	34.57								
35	ATOM	579	OD1	ASN	290	6.896	33.794	89.070	1.00
	37.25								
	ATOM	580	ND2	ASN	290	6.218	35.503	90.363	1.00
	34.64								
	ATOM	583	C	ASN	290	7.237	36.170	85.607	1.00
40	28.72								
	ATOM	584	O	ASN	290	6.569	35.665	84.709	1.00
	29.41								
	ATOM	585	N	LEU	291	7.809	37.362	85.487	1.00
	28.18								
45	ATOM	587	CA	LEU	291	7.664	38.119	84.240	1.00
	25.84								
	ATOM	588	CB	LEU	291	8.223	39.546	84.437	1.00
	26.13								
	ATOM	589	CG	LEU	291	8.169	40.485	83.236	1.00
50	26.10								
	ATOM	590	CD1	LEU	291	8.014	41.938	83.754	1.00
	24.19								
	ATOM	591	CD2	LEU	291	9.437	40.315	82.403	1.00
	25.70								
55	ATOM	592	C	LEU	291	8.366	37.411	83.085	1.00
	23.49								
	ATOM	593	O	LEU	291	7.844	37.383	81.992	1.00
	23.93								

	ATOM	594	N	MET	292	9.561	36.863	83.321	1.00
	24.90								
	ATOM	596	CA	MET	292	10.305	36.165	82.260	1.00
	24.87								
5	ATOM	597	CB	MET	292	11.686	35.687	82.745	1.00
	25.73								
	ATOM	598	CG	MET	292	12.792	36.757	82.932	1.00
	25.22								
10	ATOM	599	SD	MET	292	14.277	36.170	83.568	1.00
	24.22								
	ATOM	600	CE	MET	292	14.270	36.727	85.291	1.00
	31.98								
	ATOM	601	C	MET	292	9.499	34.964	81.724	1.00
	24.23								
15	ATOM	602	O	MET	292	9.625	34.616	80.557	1.00
	25.70								
	ATOM	603	N	LYS	293	8.677	34.329	82.561	1.00
	23.39								
20	ATOM	605	CA	LYS	293	7.841	33.210	82.072	1.00
	24.49								
	ATOM	606	CB	LYS	293	6.979	32.614	83.193	1.00
	22.46								
	ATOM	607	CG	LYS	293	7.721	31.947	84.349	1.00
	25.48								
25	ATOM	608	CD	LYS	293	6.832	31.844	85.573	1.00
	25.08								
	ATOM	609	CE	LYS	293	7.556	31.097	86.636	1.00
	25.94								
30	ATOM	610	NZ	LYS	293	6.747	31.053	87.900	1.00
	28.18								
	ATOM	614	C	LYS	293	6.920	33.656	80.922	1.00
	25.40								
	ATOM	615	O	LYS	293	6.600	32.875	80.031	1.00
	26.85								
35	ATOM	616	N	GLN	294	6.533	34.931	80.894	1.00
	25.66								
	ATOM	618	CA	GLN	294	5.656	35.392	79.822	1.00
	24.99								
40	ATOM	619	CB	GLN	294	4.719	36.481	80.333	1.00
	25.55								
	ATOM	620	CG	GLN	294	3.972	36.097	81.601	1.00
	23.62								
	ATOM	621	CD	GLN	294	3.143	34.849	81.413	1.00
	27.88								
45	ATOM	622	OE1	GLN	294	2.618	34.623	80.337	1.00
	31.73								
	ATOM	623	NE2	GLN	294	3.025	34.026	82.465	1.00
	30.15								
50	ATOM	626	C	GLN	294	6.381	35.945	78.632	1.00
	26.64								
	ATOM	627	O	GLN	294	5.752	36.231	77.623	1.00
	27.61								
	ATOM	628	N	LEU	295	7.671	36.191	78.776	1.00
	27.07								
55	ATOM	630	CA	LEU	295	8.445	36.748	77.682	1.00
	24.82								
	ATOM	631	CB	LEU	295	9.037	38.101	78.078	1.00
	25.86								

	ATOM 24.00	632	CG	LEU	295	8.053	39.234	78.210	1.00
	ATOM 23.30	633	CD1	LEU	295	8.764	40.471	78.728	1.00
5	ATOM 23.01	634	CD2	LEU	295	7.403	39.478	76.853	1.00
	ATOM 23.86	635	C	LEU	295	9.532	35.825	77.212	1.00
10	ATOM 26.71	636	O	LEU	295	10.719	36.061	77.458	1.00
	ATOM 21.39	637	N	GLN	296	9.102	34.838	76.429	1.00
	ATOM 18.39	639	CA	GLN	296	9.994	33.827	75.893	1.00
15	ATOM 22.05	640	CB	GLN	296	9.385	32.438	76.121	1.00
	ATOM 23.35	641	CG	GLN	296	9.167	32.095	77.578	1.00
20	ATOM 27.58	642	CD	GLN	296	8.581	30.699	77.779	1.00
	ATOM 34.77	643	OE1	GLN	296	9.000	29.747	77.149	1.00
	ATOM 29.64	644	NE2	GLN	296	7.616	30.580	78.676	1.00
25	ATOM 17.06	647	C	GLN	296	10.155	34.084	74.428	1.00
	ATOM 17.47	648	O	GLN	296	9.192	34.066	73.690	1.00
30	ATOM 13.82	649	N	HIS	297	11.401	34.301	74.008	1.00
	ATOM 12.19	651	CA	HIS	297	11.703	34.575	72.613	1.00
	ATOM 10.71	652	CB	HIS	297	11.385	36.056	72.315	1.00
35	ATOM 6.59	653	CG	HIS	297	11.467	36.409	70.878	1.00
	ATOM 5.42	654	CD2	HIS	297	10.512	36.487	69.917	1.00
40	ATOM 10.13	655	ND1	HIS	297	12.659	36.713	70.260	1.00
	ATOM 12.03	657	CE1	HIS	297	12.434	36.968	68.973	1.00
	ATOM 8.83	658	NE2	HIS	297	11.139	36.833	68.738	1.00
45	ATOM 12.25	660	C	HIS	297	13.205	34.340	72.404	1.00
	ATOM 13.62	661	O	HIS	297	13.968	34.478	73.319	1.00
50	ATOM 12.61	662	N	GLN	298	13.626	34.045	71.186	1.00
	ATOM 16.77	664	CA	GLN	298	15.030	33.831	70.931	1.00
	ATOM 16.56	665	CB	GLN	298	15.313	33.498	69.461	1.00
55	ATOM 21.12	666	CG	GLN	298	14.897	32.149	68.971	1.00
	ATOM 21.61	667	CD	GLN	298	15.538	30.934	69.743	1.00

5	ATOM 19.75	668	OE1	GLN	298	14.816	30.067	70.243	1.00
	ATOM 18.05	669	NE2	GLN	298	16.865	30.882	69.820	1.00
	ATOM 16.39	672	C	GLN	298	15.919	35.012	71.275	1.00
	ATOM 18.14	673	O	GLN	298	17.060	34.817	71.616	1.00
10	ATOM 18.02	674	N	ARG	299	15.395	36.228	71.128	1.00
	ATOM 14.74	676	CA	ARG	299	16.177	37.424	71.393	1.00
	ATOM 12.85	677	CB	ARG	299	15.751	38.528	70.447	1.00
15	ATOM 11.65	678	CG	ARG	299	15.842	38.137	68.986	1.00
	ATOM 9.41	679	CD	ARG	299	17.134	38.532	68.353	1.00
20	ATOM 14.53	680	NE	ARG	299	18.297	37.997	69.070	1.00
	ATOM 15.60	682	CZ	ARG	299	18.737	36.729	68.969	1.00
	ATOM 8.73	683	NH1	ARG	299	18.116	35.845	68.191	1.00
25	ATOM 14.55	686	NH2	ARG	299	19.814	36.334	69.638	1.00
	ATOM 12.76	689	C	ARG	299	16.175	37.896	72.821	1.00
30	ATOM 12.91	690	O	ARG	299	16.688	38.958	73.094	1.00
	ATOM 14.57	691	N	LEU	300	15.598	37.130	73.729	1.00
	ATOM 15.73	693	CA	LEU	300	15.541	37.516	75.134	1.00
35	ATOM 15.13	694	CB	LEU	300	14.067	37.756	75.559	1.00
	ATOM 15.54	695	CG	LEU	300	13.391	39.110	75.214	1.00
40	ATOM 9.79	696	CD1	LEU	300	13.400	39.375	73.735	1.00
	ATOM 14.31	697	CD2	LEU	300	11.951	39.110	75.789	1.00
	ATOM 15.89	698	C	LEU	300	16.125	36.387	75.998	1.00
45	ATOM 17.98	699	O	LEU	300	15.796	35.224	75.783	1.00
	ATOM 15.52	700	N	VAL	301	16.961	36.732	76.963	1.00
50	ATOM 15.64	702	CA	VAL	301	17.561	35.760	77.855	1.00
	ATOM 15.52	703	CB	VAL	301	18.371	36.443	78.934	1.00
	ATOM 14.98	704	CG1	VAL	301	18.748	35.486	80.060	1.00
55	ATOM 15.35	705	CG2	VAL	301	19.639	36.991	78.339	1.00
	ATOM 18.94	706	C	VAL	301	16.425	34.913	78.442	1.00

	ATOM	707	O	VAL	301	15.475	35.449	79.034	1.00
	20.49								
	ATOM	708	N	ARG	302	16.538	33.582	78.268	1.00
	19.16								
5	ATOM	710	CA	ARG	302	15.476	32.635	78.699	1.00
	18.40								
	ATOM	711	CB	ARG	302	15.498	31.397	77.767	1.00
	24.28								
10	ATOM	712	CG	ARG	302	14.178	30.536	77.655	1.00
	29.32								
	ATOM	713	CD	ARG	302	14.447	28.965	77.667	1.00
	36.19								
	ATOM	714	NE	ARG	302	13.268	28.086	77.463	1.00
	41.02								
15	ATOM	716	CZ	ARG	302	12.895	27.024	78.191	1.00
	43.23								
	ATOM	717	NH1	ARG	-302	13.534	26.611	79.299	1.00
	43.30								
20	ATOM	720	NH2	ARG	302	12.133	26.125	77.565	1.00
	47.92								
	ATOM	723	C	ARG	302	15.539	32.194	80.151	1.00
	15.80								
	ATOM	724	O	ARG	302	16.619	31.892	80.661	1.00
	14.82								
25	ATOM	725	N	LEU	303	14.411	32.212	80.859	1.00
	11.55								
	ATOM	727	CA	LEU	303	14.399	31.709	82.233	1.00
	14.00								
30	ATOM	728	CB	LEU	303	13.075	32.001	82.892	1.00
	14.73								
	ATOM	729	CG	LEU	303	12.928	31.481	84.331	1.00
	16.56								
	ATOM	730	CD1	LEU	303	13.913	32.167	85.251	1.00
	13.83								
35	ATOM	731	CD2	LEU	303	11.462	31.725	84.820	1.00
	10.17								
	ATOM	732	C	LEU	303	14.569	30.168	82.150	1.00
	17.81								
40	ATOM	733	O	LEU	303	13.848	29.483	81.420	1.00
	17.00								
	ATOM	734	N	TYR	304	15.552	29.637	82.854	1.00
	20.52								
	ATOM	736	CA	TYR	304	15.831	28.198	82.809	1.00
	21.34								
45	ATOM	737	CB	TYR	304	17.339	27.989	82.930	1.00
	23.44								
	ATOM	738	CG	TYR	304	17.786	26.607	82.640	1.00
	27.68								
50	ATOM	739	CD1	TYR	304	17.696	25.605	83.614	1.00
	32.52								
	ATOM	740	CE1	TYR	304	18.063	24.290	83.343	1.00
	31.28								
	ATOM	741	CD2	TYR	304	18.265	26.265	81.385	1.00
	30.83								
55	ATOM	742	CE2	TYR	304	18.636	24.943	81.103	1.00
	34.15								
	ATOM	743	CZ	TYR	304	18.530	23.974	82.093	1.00
	33.90								



	ATOM	744	OH	TYR	304	18.926	22.706	81.819	1.00
	36.03								
	ATOM	746	C	TYR	304	15.099	27.500	83.964	1.00
	21.96								
5	ATOM	747	O	TYR	304	14.425	26.499	83.764	1.00
	22.13								
	ATOM	748	N	ALA	305	15.209	28.053	85.170	1.00
	20.64								
10	ATOM	750	CA	ALA	305	14.570	27.441	86.312	1.00
	18.28								
	ATOM	751	CB	ALA	305	15.304	26.148	86.694	1.00
	16.59								
	ATOM	752	C	ALA	305	14.577	28.379	87.504	1.00
	18.49								
15	ATOM	753	O	ALA	305	15.163	29.456	87.448	1.00
	19.05								
	ATOM	754	N	VAL	306	14.007	27.905	88.607	0.75
	16.83								
20	ATOM	756	CA	VAL	306	13.954	28.661	89.842	0.75
	15.19								
	ATOM	757	CB	VAL	306	12.764	29.710	89.803	0.75
	15.23								
	ATOM	758	CG1	VAL	306	11.927	29.459	88.605	0.75
	20.64								
25	ATOM	759	CG2	VAL	306	11.921	29.725	91.030	0.75
	13.94								
	ATOM	760	C	VAL	306	13.940	27.741	91.044	0.75
	16.10								
30	ATOM	761	O	VAL	306	13.514	26.582	90.963	0.75
	15.63								
	ATOM	762	N	VAL	307	14.561	28.206	92.116	1.00
	17.75								
	ATOM	764	CA	VAL	307	14.597	27.467	93.373	1.00
	21.46								
35	ATOM	765	CB	VAL	307	16.049	27.043	93.786	1.00
	21.01								
	ATOM	766	CG1	VAL	307	16.040	26.413	95.148	1.00
	19.40								
40	ATOM	767	CG2	VAL	307	16.626	26.084	92.774	1.00
	21.25								
	ATOM	768	C	VAL	307	14.007	28.478	94.364	1.00
	25.12								
	ATOM	769	O	VAL	307	14.662	29.445	94.772	1.00
	26.63								
45	ATOM	770	N	THR	308	12.746	28.257	94.690	1.00
	27.40								
	ATOM	772	CA	THR	308	11.950	29.075	95.580	1.00
	29.59								
50	ATOM	773	CB	THR	308	10.419	28.814	95.309	1.00
	29.83								
	ATOM	774	OG1	THR	308	10.049	29.395	94.049	1.00
	33.86								
	ATOM	776	CG2	THR	308	9.547	29.357	96.404	1.00
	36.10								
55	ATOM	777	C	THR	308	12.277	29.040	97.098	1.00
	29.95								
	ATOM	778	O	THR	308	11.854	29.954	97.798	1.00
	31.04								

5	ATOM 29.60	779	N	ALA	309	12.912	27.991	97.643	1.00
	ATOM 30.23	781	CA	ALA	309	13.238	28.074	99.079	1.00
	ATOM 29.90	782	CB	ALA	309	13.392	26.727	99.771	1.00
	ATOM 31.24	783	C	ALA	309	14.515	28.884	99.226	1.00
10	ATOM 29.98	784	O	ALA	309	15.291	29.062	98.277	1.00
	ATOM 33.02	785	N	GLU	310	14.854	29.175	100.460	1.00
	ATOM 35.30	787	CA	GLU	310	16.004	30.011	100.692	1.00
	ATOM 36.75	788	CB	GLU	310	15.656	30.948	101.789	1.00
15	ATOM 41.03	789	CG	GLU	310	15.201	32.303	101.410	1.00
	ATOM 45.51	790	CD	GLU	310	14.844	33.028	102.675	1.00
	ATOM 49.70	791	OE1	GLU	310	15.311	32.566	103.742	1.00
	ATOM 45.61	792	OE2	GLU	310	14.057	33.996	102.629	1.00
20	ATOM 36.39	793	C	GLU	310	17.339	29.341	101.019	1.00
	ATOM 36.98	794	O	GLU	310	17.375	28.495	101.942	1.00
	ATOM 35.12	795	N	PRO	311	18.463	29.858	100.389	1.00
	ATOM 35.52	796	CD	PRO	311	19.811	29.252	100.425	1.00
25	ATOM 34.76	797	CA	PRO	311	18.465	31.010	99.427	1.00
	ATOM 35.47	798	CB	PRO	311	19.946	31.334	99.245	1.00
	ATOM 35.08	799	CG	PRO	311	20.559	30.004	99.238	1.00
	ATOM 34.02	800	C	PRO	311	17.796	30.904	98.018	1.00
30	ATOM 35.15	801	O	PRO	311	18.086	29.989	97.268	1.00
	ATOM 30.57	802	N	ILE	312	17.030	31.923	97.614	1.00
	ATOM 26.24	804	CA	ILE	312	16.329	31.878	96.329	1.00
	ATOM 27.45	805	CB	ILE	312	15.206	32.953	96.298	1.00
35	ATOM 25.33	806	CG2	ILE	312	14.435	32.869	95.015	1.00
	ATOM 27.69	807	CG1	ILE	312	14.310	32.765	97.536	1.00
	ATOM 31.84	808	CD1	ILE	312	13.197	33.782	97.633	1.00
	ATOM 23.75	809	C	ILE	312	17.210	31.993	95.106	1.00
40	ATOM 21.09	810	O	ILE	312	18.114	32.837	95.061	1.00

	ATOM	811	N	TYR	313	16.984	31.136	94.126	1.00
	21.51								
	ATOM	813	CA	TYR	313	17.798	31.205	92.910	1.00
	21.71								
5	ATOM	814	CB	TYR	313	18.534	29.892	92.611	1.00
	22.23								
	ATOM	815	CG	TYR	313	19.668	29.443	93.513	1.00
	24.22								
10	ATOM	816	CD1	TYR	313	20.291	30.304	94.391	1.00
	21.28								
	ATOM	817	CE1	TYR	313	21.336	29.863	95.178	1.00
	24.77								
	ATOM	818	CD2	TYR	313	20.119	28.124	93.449	1.00
	27.05								
15	ATOM	819	CE2	TYR	313	21.154	27.670	94.238	1.00
	27.82								
	ATOM	820	CZ	TYR	313	21.759	28.542	95.101	1.00
	26.54								
20	ATOM	821	OH	TYR	313	22.766	28.079	95.906	1.00
	26.31								
	ATOM	823	C	TYR	313	16.960	31.436	91.681	1.00
	19.02								
	ATOM	824	O	TYR	313	15.892	30.860	91.547	1.00
	19.71								
25	ATOM	825	N	ILE	314	17.465	32.248	90.770	0.82
	17.24								
	ATOM	827	CA	ILE	314	16.833	32.432	89.477	0.82
	16.18								
30	ATOM	828	CB	ILE	314	16.489	33.910	89.160	0.82
	14.02								
	ATOM	829	CG2	ILE	314	16.144	34.043	87.694	0.82
	14.53								
	ATOM	830	CG1	ILE	314	15.335	34.371	90.031	0.82
	15.31								
35	ATOM	831	CD1	ILE	314	14.958	35.856	89.855	0.82
	13.93								
	ATOM	832	C	ILE	314	17.912	31.927	88.488	0.82
	15.65								
40	ATOM	833	O	ILE	314	19.013	32.499	88.391	0.82
	13.85								
	ATOM	834	N	ILE	315	17.600	30.874	87.748	1.00
	15.03								
	ATOM	836	CA	ILE	315	18.543	30.294	86.817	1.00
	13.64								
45	ATOM	837	CB	ILE	315	18.589	28.746	86.947	1.00
	13.73								
	ATOM	838	CG2	ILE	315	19.637	28.154	85.991	1.00
	9.69								
50	ATOM	839	CG1	ILE	315	18.915	28.335	88.393	1.00
	13.21								
	ATOM	840	CD1	ILE	315	17.711	28.255	89.330	1.00
	9.79								
	ATOM	841	C	ILE	315	18.192	30.690	85.403	1.00
	14.14								
55	ATOM	842	O	ILE	315	17.040	30.544	84.997	1.00
	14.62								
	ATOM	843	N	THR	316	19.173	31.165	84.631	1.00
	14.85								

	ATOM	845	CA	THR	316	18.872	31.595	83.277	1.00
	14.14								
	ATOM	846	CB	THR	316	18.878	33.143	83.201	1.00
	13.98								
5	ATOM	847	OG1	THR	316	20.169	33.618	83.616	1.00
	17.04								
	ATOM	849	CG2	THR	316	17.800	33.726	84.118	1.00
	8.17								
10	ATOM	850	C	THR	316	19.839	31.078	82.216	1.00
	16.85								
	ATOM	851	O	THR	316	20.845	30.456	82.534	1.00
	17.57								
	ATOM	852	N	GLU	317	19.486	31.332	80.957	1.00
	16.91								
15	ATOM	854	CA	GLU	317	20.277	31.008	79.791	1.00
	16.67								
	ATOM	855	CB	GLU	317	19.564	31.541	78.567	1.00
	17.21								
	ATOM	856	CG	GLU	317	20.222	31.261	77.252	1.00
	14.43								
20	ATOM	857	CD	GLU	317	19.353	31.727	76.087	1.00
	18.13								
	ATOM	858	OE1	GLU	317	18.398	32.537	76.315	1.00
	14.82								
25	ATOM	859	OE2	GLU	317	19.576	31.266	74.961	1.00
	13.42								
	ATOM	860	C	GLU	317	21.673	31.664	79.890	1.00
	19.07								
	ATOM	861	O	GLU	317	21.806	32.899	80.004	1.00
	20.58								
30	ATOM	862	N	TYR	318	22.704	30.838	79.797	1.00
	18.98								
	ATOM	864	CA	TYR	318	24.067	31.333	79.909	1.00
	18.22								
35	ATOM	865	CB	TYR	318	25.030	30.186	80.223	1.00
	19.73								
	ATOM	866	CG	TYR	318	26.358	30.706	80.707	1.00
	19.63								
	ATOM	867	CD1	TYR	318	26.476	31.214	81.987	1.00
	22.75								
40	ATOM	868	CE1	TYR	318	27.677	31.676	82.465	1.00
	24.78								
	ATOM	869	CD2	TYR	318	27.479	30.673	79.884	1.00
	19.43								
45	ATOM	870	CE2	TYR	318	28.709	31.150	80.353	1.00
	20.22								
	ATOM	871	CZ	TYR	318	28.804	31.645	81.639	1.00
	24.87								
	ATOM	872	OH	TYR	318	30.005	32.114	82.121	1.00
	27.76								
50	ATOM	874	C	TYR	318	24.499	32.037	78.642	1.00
	18.73								
	ATOM	875	O	TYR	318	24.244	31.551	77.538	1.00
	18.36								
55	ATOM	876	N	MET	319	25.140	33.194	78.786	1.00
	18.80								
	ATOM	878	CA	MET	319	25.580	33.945	77.595	1.00
	18.78								

5	ATOM 18.67	879	CB	MET	319	24.855	35.289	77.554	1.00
	ATOM 13.13	880	CG	MET	319	23.322	35.146	77.365	1.00
	ATOM 14.87	881	SD	MET	319	22.872	34.497	75.765	1.00
	ATOM 11.13	882	CE	MET	319	23.121	35.815	74.681	1.00
10	ATOM 20.76	883	C	MET	319	27.101	34.078	77.686	1.00
	ATOM 22.04	884	O	MET	319	27.637	34.830	78.490	1.00
15	ATOM 22.41	885	N	GLU	320	27.775	33.343	76.825	1.00
	ATOM 23.90	887	CA	GLU	320	29.220	33.251	76.844	1.00
	ATOM 27.88	888	CB	GLU	320	29.736	32.360	75.714	1.00
20	ATOM 36.74	889	CG	GLU	320	31.143	31.847	75.990	1.00
	ATOM 43.00	890	CD	GLU	320	31.169	30.929	77.210	1.00
25	ATOM 46.34	891	OE1	GLU	320	30.333	29.992	77.268	1.00
	ATOM 46.76	892	OE2	GLU	320	32.004	31.132	78.135	1.00
	ATOM 22.26	893	C	GLU	320	30.042	34.514	76.872	1.00
30	ATOM 19.88	894	O	GLU	320	31.014	34.546	77.606	1.00
	ATOM 21.61	895	N	ASN	321	29.643	35.531	76.115	1.00
	ATOM 20.96	897	CA	ASN	321	30.434	36.739	76.062	1.00
35	ATOM 22.07	898	CB	ASN	321	30.647	37.164	74.591	1.00
	ATOM 22.87	899	CG	ASN	321	31.705	36.304	73.903	1.00
40	ATOM 24.57	900	OD1	ASN	321	31.523	35.816	72.784	1.00
	ATOM 19.26	901	ND2	ASN	321	32.796	36.080	74.608	1.00
45	ATOM 18.96	904	C	ASN	321	30.012	37.866	76.966	1.00
	ATOM 20.52	905	O	ASN	321	30.377	39.016	76.738	1.00
	ATOM 16.99	906	N	GLY	322	29.231	37.519	77.975	1.00
50	ATOM 16.93	908	CA	GLY	322	28.769	38.471	78.979	1.00
	ATOM 14.71	909	C	GLY	322	28.044	39.711	78.495	1.00
55	ATOM 15.91	910	O	GLY	322	27.388	39.631	77.460	1.00
	ATOM 12.37	911	N	SER	323	28.327	40.851	79.105	0.43
	ATOM 11.44	913	CA	SER	323	27.646	42.064	78.698	0.43

5	ATOM 12.56	914	CB	SER	323	27.596	43.084	79.841	0.43
	ATOM 22.42	915	OG	SER	323	28.794	43.830	79.919	0.43
	ATOM 9.75	917	C	SER	323	28.189	42.694	77.472	0.43
	ATOM 7.93	918	O	SER	323	29.388	42.697	77.253	0.43
10	ATOM 12.31	919	N	LEU	324	27.272	43.230	76.680	1.00
	ATOM 13.53	921	CA	LEU	324	27.636	43.886	75.441	1.00
	ATOM 11.33	922	CB	LEU	324	26.431	44.378	74.643	1.00
15	ATOM 11.74	923	CG	LEU	324	26.783	45.050	73.315	1.00
	ATOM 11.30	924	CD1	LEU	324	27.129	44.114	72.137	1.00
	ATOM 13.50	925	CD2	LEU	324	25.487	45.831	72.929	1.00
20	ATOM 14.72	926	C	LEU	324	28.560	45.053	75.824	1.00
	ATOM 15.57	927	O	LEU	324	29.626	45.171	75.249	1.00
	ATOM 14.93	928	N	VAL	325	28.226	45.764	76.882	1.00
25	ATOM 16.29	930	CA	VAL	325	29.051	46.873	77.264	1.00
	ATOM 13.59	931	CB	VAL	325	28.448	47.689	78.401	1.00
	ATOM 14.56	932	CG1	VAL	325	28.612	47.004	79.724	1.00
30	ATOM 15.75	933	CG2	VAL	325	29.095	49.059	78.404	1.00
	ATOM 19.59	934	C	VAL	325	30.488	46.427	77.590	1.00
	ATOM 19.46	935	O	VAL	325	31.457	47.137	77.313	1.00
35	ATOM 18.89	936	N	ASP	326	30.635	45.209	78.126	1.00
	ATOM 16.74	938	CA	ASP	326	31.969	44.711	78.426	1.00
	ATOM 15.36	939	CB	ASP	326	31.937	43.714	79.539	1.00
40	ATOM 18.53	940	CG	ASP	326	31.595	44.321	80.855	1.00
	ATOM 22.26	941	OD1	ASP	326	31.915	45.501	81.089	1.00
	ATOM 21.60	942	OD2	ASP	326	31.004	43.623	81.697	1.00
45	ATOM 17.28	943	C	ASP	326	32.603	44.066	77.218	1.00
	ATOM 19.53	944	O	ASP	326	33.792	44.270	76.924	1.00
	ATOM 16.77	945	N	PHE	327	31.807	43.309	76.487	1.00
55	ATOM 15.42	947	CA	PHE	327	32.300	42.609	75.305	1.00

5	ATOM 16.38	948	CB	PHE	327	31.167	41.806	74.651	1.00
	ATOM 18.43	949	CG	PHE	327	31.582	41.145	73.377	1.00
	ATOM 17.80	950	CD1	PHE	327	32.504	40.079	73.406	1.00
	ATOM 19.13	951	CD2	PHE	327	31.133	41.595	72.172	1.00
	ATOM 17.90	952	CE1	PHE	327	32.956	39.501	72.254	1.00
10	ATOM 18.88	953	CE2	PHE	327	31.575	41.019	70.983	1.00
	ATOM 20.02	954	CZ	PHE	327	32.491	39.971	71.022	1.00
	ATOM 14.46	955	C	PHE	327	32.925	43.534	74.257	1.00
15	ATOM 15.79	956	O	PHE	327	33.924	43.143	73.608	1.00
	ATOM 10.06	957	N	LEU	328	32.331	44.711	74.078	0.40
	ATOM 7.95	959	CA	LEU	328	32.798	45.658	73.078	0.40
	ATOM 5.19	960	CB	LEU	328	31.793	46.801	72.949	0.40
20	ATOM 2.00	961	CG	LEU	328	30.499	46.422	72.223	0.40
	ATOM 2.00	962	CD1	LEU	328	29.622	47.623	72.147	0.40
25	ATOM 2.00	963	CD2	LEU	328	30.823	45.921	70.838	0.40
	ATOM 8.30	964	C	LEU	328	34.172	46.227	73.360	0.40
	ATOM 5.91	965	O	LEU	328	34.786	46.852	72.507	0.40
30	ATOM 13.67	966	N	LYS	329	34.650	46.004	74.569	1.00
	ATOM 17.41	968	CA	LYS	329	35.946	46.510	74.960	1.00
35	ATOM 14.37	969	CB	LYS	329	35.886	47.085	76.365	1.00
	ATOM 15.62	970	CG	LYS	329	34.906	48.185	76.494	1.00
	ATOM 16.67	971	CD	LYS	329	34.845	48.643	77.935	1.00
40	ATOM 17.36	972	CE	LYS	329	33.757	49.685	78.082	1.00
	ATOM 20.17	973	NZ	LYS	329	33.631	50.022	79.532	1.00
45	ATOM 20.20	977	C	LYS	329	37.026	45.430	74.893	1.00
	ATOM 25.35	978	O	LYS	329	38.195	45.707	75.091	1.00
	ATOM 18.94	979	N	THR	330	36.646	44.192	74.618	1.00
50	ATOM 14.51	981	CA	THR	330	37.630	43.131	74.547	1.00
	ATOM 11.78	982	CB	THR	330	36.957	41.722	74.733	1.00

	ATOM 14.69	983	OG1	THR	330	36.088	41.483	73.653	1.00
	ATOM 8.84	985	CG2	THR	330	36.167	41.654	76.008	1.00
5	ATOM 15.86	986	C	THR	330	38.279	43.175	73.184	1.00
	ATOM 20.22	987	O	THR	330	37.781	43.845	72.271	1.00
10	ATOM 15.75	988	N	PRO	331	39.413	42.461	73.015	1.00
	ATOM 11.93	989	CD	PRO	331	40.192	41.763	74.059	1.00
	ATOM 14.76	990	CA	PRO	331	40.109	42.429	71.725	1.00
15	ATOM 12.37	991	CB	PRO	331	41.241	41.424	71.979	1.00
	ATOM 11.73	992	CG	PRO	331	41.562	41.646	73.417	1.00
20	ATOM 16.66	993	C	PRO	331	39.166	41.993	70.607	1.00
	ATOM 18.42	994	O	PRO	331	39.208	42.526	69.507	1.00
	ATOM 19.45	995	N	SER	332	38.283	41.033	70.884	1.00
25	ATOM 21.00	997	CA	SER	332	37.333	40.590	69.866	1.00
	ATOM 24.09	998	CB	SER	332	36.594	39.321	70.309	1.00
30	ATOM 31.13	999	OG	SER	332	37.486	38.231	70.423	1.00
	ATOM 19.06	1001	C	SER	332	36.309	41.670	69.588	1.00
	ATOM 21.97	1002	O	SER	332	35.994	41.908	68.446	1.00
35	ATOM 20.79	1003	N	GLY	333	35.759	42.271	70.639	1.00
	ATOM 22.67	1005	CA	GLY	333	34.769	43.330	70.447	1.00
40	ATOM 22.18	1006	C	GLY	333	35.350	44.503	69.650	1.00
	ATOM 21.13	1007	O	GLY	333	34.730	44.985	68.705	1.00
	ATOM 22.89	1008	N	ILE	334	36.576	44.890	70.002	1.00
45	ATOM 23.12	1010	CA	ILE	334	37.236	46.007	69.329	1.00
	ATOM 23.80	1011	CB	ILE	334	38.631	46.354	69.928	1.00
50	ATOM 25.22	1012	CG2	ILE	334	39.113	47.598	69.248	1.00
	ATOM 22.41	1013	CG1	ILE	334	38.582	46.603	71.458	1.00
	ATOM 21.59	1014	CD1	ILE	334	39.990	46.590	72.189	1.00
55	ATOM 23.63	1015	C	ILE	334	37.407	45.787	67.815	1.00
	ATOM 24.35	1016	O	ILE	334	37.290	46.710	67.047	1.00



	ATOM	1017	N	LYS	335	37.648	44.555	67.381	1.00
	26.06								
	ATOM	1019	CA	LYS	335	37.830	44.292	65.959	1.00
	27.33								
5	ATOM	1020	CB	LYS	335	38.616	43.001	65.763	1.00
	30.12								
	ATOM	1021	CG	LYS	335	40.007	43.052	66.331	1.00
	36.81								
10	ATOM	1022	CD	LYS	335	40.582	41.644	66.546	1.00
	40.63								
	ATOM	1023	CE	LYS	335	41.918	41.735	67.231	1.00
	41.34								
	ATOM	1024	NZ	LYS	335	42.211	40.491	67.953	1.00
	40.29								
15	ATOM	1028	C	LYS	335	36.558	44.225	65.137	1.00
	25.83								
	ATOM	1029	O	LYS	335	36.629	44.133	63.919	1.00
	24.93								
20	ATOM	1030	N	LEU	336	35.408	44.292	65.787	1.00
	25.22								
	ATOM	1032	CA	LEU	336	34.145	44.197	65.047	1.00
	25.55								
	ATOM	1033	CB	LEU	336	32.954	44.138	66.034	1.00
	26.91								
25	ATOM	1034	CG	LEU	336	32.907	42.865	66.938	1.00
	25.49								
	ATOM	1035	CD1	LEU	336	31.774	42.861	67.935	1.00
	28.40								
30	ATOM	1036	CD2	LEU	336	32.872	41.599	66.116	1.00
	22.50								
	ATOM	1037	C	LEU	336	33.971	45.282	63.993	1.00
	25.58								
	ATOM	1038	O	LEU	336	34.276	46.428	64.259	1.00
	28.02								
35	ATOM	1039	N	THR	337	33.495	44.910	62.802	1.00
	25.27								
	ATOM	1041	CA	THR	337	33.241	45.891	61.742	1.00
	25.86								
40	ATOM	1042	CB	THR	337	33.166	45.222	60.318	1.00
	25.88								
	ATOM	1043	OG1	THR	337	31.993	44.387	60.185	1.00
	26.06								
	ATOM	1045	CG2	THR	337	34.417	44.369	60.091	1.00
	26.41								
45	ATOM	1046	C	THR	337	31.935	46.648	62.062	1.00
	25.21								
	ATOM	1047	O	THR	337	31.162	46.183	62.910	1.00
	24.24								
	ATOM	1048	N	ILE	338	31.728	47.795	61.416	1.00
50	22.87								
	ATOM	1050	CA	ILE	338	30.489	48.561	61.632	1.00
	23.64								
	ATOM	1051	CB	ILE	338	30.484	49.881	60.824	1.00
	20.07								
55	ATOM	1052	CG2	ILE	338	30.632	49.557	59.351	1.00
	19.98								
	ATOM	1053	CG1	ILE	338	29.217	50.695	61.122	1.00
	19.49								

	ATOM 16.21	1054	CD1	ILE	338	29.044	51.055	62.619	1.00
	ATOM 22.37	1055	C	ILE	338	29.331	47.676	61.187	1.00
5	ATOM 25.54	1056	O	ILE	338	28.240	47.755	61.744	1.00
	ATOM 22.72	1057	N	ASN	339	29.605	46.806	60.223	1.00
10	ATOM 22.70	1059	CA	ASN	339	28.605	45.869	59.704	1.00
	ATOM 27.00	1060	CB	ASN	339	29.225	45.059	58.566	1.00
	ATOM 35.39	1061	CG	ASN	339	28.571	43.704	58.390	1.00
15	ATOM 38.99	1062	OD1	ASN	339	27.387	43.636	58.127	1.00
	ATOM 37.08	1063	ND2	ASN	339	29.346	42.623	58.527	1.00
20	ATOM 21.63	1066	C	ASN	339	28.060	44.948	60.802	1.00
	ATOM 20.41	1067	O	ASN	339	26.857	44.795	60.961	1.00
	ATOM 21.18	1068	N	LYS	340	28.961	44.369	61.595	1.00
25	ATOM 20.62	1070	CA	LYS	340	28.552	43.474	62.664	1.00
	ATOM 17.18	1071	CB	LYS	340	29.731	42.654	63.179	1.00
30	ATOM 17.20	1072	CG	LYS	340	29.389	41.735	64.356	1.00
	ATOM 17.23	1073	CD	LYS	340	28.338	40.693	63.958	1.00
	ATOM 19.05	1074	CE	LYS	340	27.957	39.875	65.176	1.00
35	ATOM 18.26	1075	NZ	LYS	340	26.872	38.871	64.846	1.00
	ATOM 20.56	1079	C	LYS	340	27.892	44.265	63.807	1.00
40	ATOM 19.99	1080	O	LYS	340	26.996	43.754	64.499	1.00
	ATOM 18.72	1081	N	LEU	341	28.372	45.485	64.038	1.00
	ATOM 18.01	1083	CA	LEU	341	27.760	46.309	65.067	1.00
45	ATOM 18.92	1084	CB	LEU	341	28.547	47.598	65.242	1.00
	ATOM 20.09	1085	CG	LEU	341	29.977	47.455	65.749	1.00
50	ATOM 19.43	1086	CD1	LEU	341	30.629	48.814	65.891	1.00
	ATOM 20.52	1087	CD2	LEU	341	29.977	46.775	67.103	1.00
	ATOM 17.59	1088	C	LEU	341	26.303	46.661	64.694	1.00
55	ATOM 18.31	1089	O	LEU	341	25.457	46.724	65.559	1.00
	ATOM 17.36	1090	N	LEU	342	26.044	46.864	63.411	1.00

	ATOM	1092	CA	LEU	342	24.716	47.210	62.932	1.00
	18.37								
	ATOM	1093	CB	LEU	342	24.805	47.753	61.496	1.00
	16.74								
5	ATOM	1094	CG	LEU	342	25.497	49.147	61.460	1.00
	18.05								
	ATOM	1095	CD1	LEU	342	25.819	49.476	60.011	1.00
	13.77								
10	ATOM	1096	CD2	LEU	342	24.607	50.233	62.125	1.00
	13.53								
	ATOM	1097	C	LEU	342	23.833	45.961	63.031	1.00
	18.66								
	ATOM	1098	O	LEU	342	22.634	46.049	63.299	1.00
	17.97								
15	ATOM	1099	N	ASP	343	24.491	44.816	62.914	1.00
	20.90								
	ATOM	1101	CA	ASP	343	23.867	43.494	63.017	1.00
	20.25								
20	ATOM	1102	CB	ASP	343	24.896	42.395	62.683	1.00
	19.73								
	ATOM	1103	CG	ASP	343	24.417	40.993	63.026	1.00
	18.77								
	ATOM	1104	OD1	ASP	343	23.220	40.755	63.221	1.00
	18.48								
25	ATOM	1105	OD2	ASP	343	25.268	40.100	63.076	1.00
	19.66								
	ATOM	1106	C	ASP	343	23.402	43.353	64.438	1.00
	17.56								
30	ATOM	1107	O	ASP	343	22.227	43.126	64.696	1.00
	17.02								
	ATOM	1108	N	MET	344	24.337	43.525	65.363	1.00
	17.57								
	ATOM	1110	CA	MET	344	23.940	43.438	66.754	1.00
	18.94								
35	ATOM	1111	CB	MET	344	25.159	43.614	67.636	1.00
	22.04								
	ATOM	1112	CG	MET	344	26.205	42.564	67.317	1.00
	20.27								
40	ATOM	1113	SD	MET	344	27.702	42.778	68.340	1.00
	25.96								
	ATOM	1114	CE	MET	344	27.750	41.447	69.307	1.00
	22.39								
	ATOM	1115	C	MET	344	22.832	44.414	67.132	1.00
	16.14								
45	ATOM	1116	O	MET	344	21.929	44.037	67.828	1.00
	16.41								
	ATOM	1117	N	ALA	345	22.904	45.652	66.647	1.00
	16.35								
50	ATOM	1119	CA	ALA	345	21.848	46.656	66.952	1.00
	16.04								
	ATOM	1120	CB	ALA	345	22.196	48.009	66.306	1.00
	15.38								
	ATOM	1121	C	ALA	345	20.475	46.163	66.481	1.00
	12.30								
55	ATOM	1122	O	ALA	345	19.496	46.319	67.209	1.00
	13.10								
	ATOM	1123	N	ALA	346	20.414	45.615	65.273	1.00
	12.19								

5	ATOM 15.73	1125	CA	ALA	346	19.153	45.072	64.749	1.00
	ATOM 14.07	1126	CB	ALA	346	19.336	44.622	63.306	1.00
	ATOM 17.64	1127	C	ALA	346	18.625	43.928	65.615	1.00
	ATOM 21.71	1128	O	ALA	346	17.436	43.843	65.851	1.00
10	ATOM 18.84	1129	N	GLN	347	19.527	43.064	66.118	1.00
	ATOM 17.03	1131	CA	GLN	347	19.121	41.930	66.947	1.00
	ATOM 13.90	1132	CB	GLN	347	20.318	41.035	67.320	1.00
15	ATOM 17.33	1133	CG	GLN	347	21.028	40.452	66.101	1.00
	ATOM 15.74	1134	CD	GLN	347	22.086	39.395	66.450	1.00
20	ATOM 13.53	1135	OE1	GLN	347	22.058	38.793	67.527	1.00
	ATOM 13.32	1136	NE2	GLN	347	23.009	39.142	65.508	1.00
	ATOM 17.85	1139	C	GLN	347	18.461	42.434	68.214	1.00
25	ATOM 18.87	1140	O	GLN	347	17.469	41.872	68.650	1.00
	ATOM 17.10	1141	N	ILE	348	19.026	43.474	68.796	1.00
30	ATOM 17.32	1143	CA	ILE	348	18.501	44.082	70.018	1.00
	ATOM 16.99	1144	CB	ILE	348	19.469	45.204	70.508	1.00
	ATOM 12.02	1145	CG2	ILE	348	18.892	45.990	71.694	1.00
35	ATOM 17.04	1146	CG1	ILE	348	20.791	44.532	70.895	1.00
	ATOM 15.48	1147	CD1	ILE	348	21.913	45.483	71.171	1.00
40	ATOM 16.91	1148	C	ILE	348	17.142	44.691	69.701	1.00
	ATOM 16.81	1149	O	ILE	348	16.212	44.525	70.447	1.00
	ATOM 16.01	1150	N	ALA	349	17.071	45.393	68.584	1.00
45	ATOM 15.43	1152	CA	ALA	349	15.852	46.024	68.152	1.00
	ATOM 9.59	1153	CB	ALA	349	16.080	46.841	66.879	1.00
	ATOM 15.31	1154	C	ALA	349	14.772	44.936	67.910	1.00
50	ATOM 13.86	1155	O	ALA	349	13.602	45.173	68.183	1.00
	ATOM 15.50	1156	N	GLU	350	15.174	43.746	67.460	1.00
55	ATOM 16.08	1158	CA	GLU	350	14.238	42.630	67.221	1.00
	ATOM 17.84	1159	CB	GLU	350	14.964	41.524	66.455	1.00

5	ATOM	1160	CG	GLU	350	14.132	40.344	66.101	1.00
	21.98								
	ATOM	1161	CD	GLU	350	14.942	39.274	65.337	1.00
	26.03								
	ATOM	1162	OE1	GLU	350	15.942	39.592	64.646	1.00
10	25.60								
	ATOM	1163	OE2	GLU	350	14.546	38.095	65.408	1.00
	29.09								
	ATOM	1164	C	GLU	350	13.695	42.103	68.531	1.00
	15.26								
15	ATOM	1165	O	GLU	350	12.516	41.770	68.622	1.00
	13.24								
	ATOM	1166	N	GLY	351	14.574	41.999	69.540	1.00
	14.92								
	ATOM	1168	CA	GLY	351	14.124	41.554	70.855	1.00
20	15.10								
	ATOM	1169	C	GLY	351	13.134	42.578	71.418	1.00
	17.07								
	ATOM	1170	O	GLY	351	12.089	42.209	71.970	1.00
	19.38								
25	ATOM	1171	N	MET	352	13.462	43.860	71.291	1.00
	16.33								
	ATOM	1173	CA	MET	352	12.575	44.898	71.824	1.00
	14.83								
	ATOM	1174	CB	MET	352	13.274	46.268	71.799	1.00
30	17.15								
	ATOM	1175	CG	MET	352	14.404	46.402	72.806	1.00
	12.62								
	ATOM	1176	SD	MET	352	13.996	46.063	74.508	1.00
	15.26								
35	ATOM	1177	CE	MET	352	12.540	47.225	74.678	1.00
	13.35								
	ATOM	1178	C	MET	352	11.256	44.956	71.072	1.00
	13.44								
	ATOM	1179	O	MET	352	10.261	45.337	71.647	1.00
40	14.17								
	ATOM	1180	N	ALA	353	11.240	44.567	69.790	1.00
	11.98								
	ATOM	1182	CA	ALA	353	10.001	44.558	69.022	1.00
	11.64								
45	ATOM	1183	CB	ALA	353	10.267	44.268	67.587	1.00
	10.76								
	ATOM	1184	C	ALA	353	9.076	43.504	69.584	1.00
	15.00								
	ATOM	1185	O	ALA	353	7.852	43.658	69.546	1.00
50	17.11								
	ATOM	1186	N	PHE	354	9.672	42.420	70.085	1.00
	17.52								
	ATOM	1188	CA	PHE	354	8.931	41.346	70.696	1.00
	15.71								
55	ATOM	1189	CB	PHE	354	9.852	40.157	71.024	1.00
	16.79								
	ATOM	1190	CG	PHE	354	9.167	39.089	71.803	1.00
	15.49								
	ATOM	1191	CD1	PHE	354	8.110	38.438	71.216	1.00
	16.89								
	ATOM	1192	CD2	PHE	354	9.468	38.821	73.124	1.00
	14.96								

	ATOM	1193	CE1	PHE	354	7.334	37.548	71.915	1.00
	15.69								
	ATOM	1194	CE2	PHE	354	8.687	37.907	73.856	1.00
	16.25								
5	ATOM	1195	CZ	PHE	354	7.613	37.279	73.233	1.00
	14.21								
	ATOM	1196	C	PHE	354	8.295	41.890	71.973	1.00
	14.98								
10	ATOM	1197	O	PHE	354	7.097	41.709	72.180	1.00
	15.65								
	ATOM	1198	N	ILE	355	9.100	42.516	72.831	1.00
	13.91								
	ATOM	1200	CA	ILE	355	8.610	43.093	74.083	1.00
	15.69								
15	ATOM	1201	CB	ILE	355	9.780	43.731	74.800	1.00
	14.98								
	ATOM	1202	CG2	ILE	355	9.306	44.671	75.941	1.00
	15.02								
	ATOM	1203	CG1	ILE	355	10.713	42.635	75.290	1.00
20	13.68								
	ATOM	1204	CD1	ILE	355	11.981	43.106	76.050	1.00
	13.62								
	ATOM	1205	C	ILE	355	7.459	44.101	73.798	1.00
	15.54								
25	ATOM	1206	O	ILE	355	6.414	44.063	74.408	1.00
	15.57								
	ATOM	1207	N	GLU	356	7.645	44.880	72.751	1.00
	16.21								
	ATOM	1209	CA	GLU	356	6.691	45.881	72.326	1.00
30	17.55								
	ATOM	1210	CB	GLU	356	7.289	46.645	71.150	1.00
	17.46								
	ATOM	1211	CG	GLU	356	6.388	47.565	70.371	1.00
	20.93								
35	ATOM	1212	CD	GLU	356	7.166	48.283	69.248	1.00
	25.88								
	ATOM	1213	OE1	GLU	356	7.312	47.785	68.095	1.00
	26.40								
	ATOM	1214	OE2	GLU	356	7.667	49.364	69.519	1.00
40	28.48								
	ATOM	1215	C	GLU	356	5.356	45.242	71.936	1.00
	17.60								
	ATOM	1216	O	GLU	356	4.325	45.698	72.383	1.00
	19.61								
45	ATOM	1217	N	GLU	357	5.415	44.192	71.118	0.36
	14.79								
	ATOM	1219	CA	GLU	357	4.242	43.456	70.661	0.36
	12.79								
	ATOM	1220	CB	GLU	357	4.727	42.434	69.605	0.36
50	12.71								
	ATOM	1221	CG	GLU	357	3.842	41.280	69.204	0.36
	16.32								
	ATOM	1222	CD	GLU	357	4.647	40.034	68.710	0.36
	21.70								
55	ATOM	1223	OE1	GLU	357	5.869	40.104	68.400	0.36
	23.32								
	ATOM	1224	OE2	GLU	357	4.033	38.948	68.665	0.36
	25.20								

	ATOM	1225	C	GLU	357	3.470	42.803	71.823	0.36
	10.96								
	ATOM	1226	O	GLU	357	2.255	42.749	71.813	0.36
	8.17								
5	ATOM	1227	N	ARG	358	4.174	42.404	72.866	1.00
	14.43								
	ATOM	1229	CA	ARG	358	3.531	41.750	74.016	1.00
	14.57								
10	ATOM	1230	CB	ARG	358	4.523	40.756	74.676	1.00
	15.08								
	ATOM	1231	CG	ARG	358	5.074	39.682	73.719	1.00
	15.68								
	ATOM	1232	CD	ARG	358	3.940	38.859	73.095	1.00
	16.35								
15	ATOM	1233	NE	ARG	358	2.986	38.399	74.097	1.00
	20.96								
	ATOM	1235	CZ	ARG	358	1.710	38.155	73.826	1.00
	22.73								
	ATOM	1236	NH1	ARG	358	1.270	38.313	72.594	1.00
20	19.50								
	ATOM	1239	NH2	ARG	358	0.860	37.789	74.773	1.00
	25.50								
	ATOM	1242	C	ARG	358	3.005	42.728	75.054	1.00
	14.70								
25	ATOM	1243	O	ARG	358	2.633	42.324	76.146	1.00
	16.87								
	ATOM	1244	N	ASN	359	3.036	44.025	74.755	1.00
	16.35								
	ATOM	1246	CA	ASN	359	2.580	45.025	75.741	1.00
30	16.01								
	ATOM	1247	CB	ASN	359	1.121	44.772	76.134	1.00
	17.72								
	ATOM	1248	CG	ASN	359	0.162	45.263	75.077	1.00
	20.99								
35	ATOM	1249	OD1	ASN	359	0.591	45.886	74.139	1.00
	23.16								
	ATOM	1250	ND2	ASN	359	-1.126	44.936	75.193	1.00
	23.65								
	ATOM	1253	C	ASN	359	3.441	45.185	76.985	1.00
40	16.43								
	ATOM	1254	O	ASN	359	2.945	45.523	78.062	1.00
	17.27								
	ATOM	1255	N	TYR	360	4.731	44.912	76.859	1.00
	17.35								
45	ATOM	1257	CA	TYR	360	5.618	45.104	78.010	1.00
	18.37								
	ATOM	1258	CB	TYR	360	6.487	43.865	78.282	1.00
	17.76								
	ATOM	1259	CG	TYR	360	5.782	42.747	78.996	1.00
50	16.41								
	ATOM	1260	CD1	TYR	360	4.982	41.863	78.290	1.00
	18.58								
	ATOM	1261	CE1	TYR	360	4.323	40.835	78.945	1.00
	20.66								
55	ATOM	1262	CD2	TYR	360	5.910	42.581	80.355	1.00
	17.13								
	ATOM	1263	CE2	TYR	360	5.253	41.560	81.023	1.00
	20.21								

	ATOM	1264	CZ	TYR	360	4.463	40.700	80.314	1.00
	19.85								
	ATOM	1265	OH	TYR	360	3.743	39.736	80.985	1.00
	26.09								
5	ATOM	1267	C	TYR	360	6.572	46.266	77.723	1.00
	17.97								
	ATOM	1268	O	TYR	360	6.696	46.727	76.596	1.00
	14.07								
10	ATOM	1269	N	ILE	361	7.198	46.752	78.782	1.00
	18.53								
	ATOM	1271	CA	ILE	361	8.219	47.755	78.665	1.00
	20.70								
	ATOM	1272	CB	ILE	361	7.779	49.180	79.175	1.00
	20.42								
15	ATOM	1273	CG2	ILE	361	6.761	49.799	78.224	1.00
	20.38								
	ATOM	1274	CG1	ILE	361	7.310	49.121	80.610	1.00
	20.54								
	ATOM	1275	CD1	ILE	361	7.026	50.483	81.187	1.00
20	24.78								
	ATOM	1276	C	ILE	361	9.382	47.205	79.488	1.00
	21.11								
	ATOM	1277	O	ILE	361	9.184	46.410	80.408	1.00
	23.36								
25	ATOM	1278	N	HIS	362	10.587	47.659	79.183	1.00
	20.32								
	ATOM	1280	CA	HIS	362	11.778	47.195	79.900	1.00
	18.13								
30	ATOM	1281	CB	HIS	362	12.876	46.935	78.865	1.00
	17.63								
	ATOM	1282	CG	HIS	362	14.083	46.232	79.419	1.00
	18.12								
	ATOM	1283	CD2	HIS	362	14.479	44.945	79.323	1.00
	18.04								
35	ATOM	1284	ND1	HIS	362	15.052	46.880	80.162	1.00
	17.47								
	ATOM	1286	CE1	HIS	362	15.995	46.017	80.494	1.00
	19.69								
40	ATOM	1287	NE2	HIS	362	15.669	44.837	80.002	1.00
	19.55								
	ATOM	1289	C	HIS	362	12.250	48.182	80.953	1.00
	16.38								
	ATOM	1290	O	HIS	362	12.533	47.820	82.077	1.00
	16.56								
45	ATOM	1291	N	ARG	363	12.384	49.442	80.541	1.00
	18.77								
	ATOM	1293	CA	ARG	363	12.795	50.537	81.437	1.00
	19.55								
50	ATOM	1294	CB	ARG	363	11.940	50.584	82.703	1.00
	16.82								
	ATOM	1295	CG	ARG	363	10.450	50.871	82.432	1.00
	15.69								
	ATOM	1296	CD	ARG	363	9.746	51.332	83.693	1.00
	12.82								
55	ATOM	1297	NE	ARG	363	9.807	50.377	84.769	1.00
	16.17								
	ATOM	1299	CZ	ARG	363	9.719	50.708	86.044	1.00
	16.47								



5	ATOM 21.41	1300	NH1	ARG	363	9.575	51.976	86.373	1.00
	ATOM 19.50	1303	NH2	ARG	363	9.731	49.787	86.988	1.00
	ATOM 20.13	1306	C	ARG	363	14.258	50.557	81.853	1.00
10	ATOM 23.91	1307	O	ARG	363	14.649	51.438	82.576	1.00
	ATOM 19.03	1308	N	ASP	364	15.058	49.579	81.441	1.00
	ATOM 16.53	1310	CA	ASP	364	16.485	49.567	81.836	1.00
15	ATOM 19.77	1311	CB	ASP	364	16.697	48.592	82.978	1.00
	ATOM 23.49	1312	CG	ASP	364	17.928	48.901	83.840	1.00
	ATOM 24.42	1313	OD1	ASP	364	18.660	49.876	83.582	1.00
20	ATOM 27.26	1314	OD2	ASP	364	18.153	48.176	84.825	1.00
	ATOM 16.47	1315	C	ASP	364	17.296	49.147	80.620	1.00
	ATOM 17.58	1316	O	ASP	364	18.284	48.424	80.741	1.00
25	ATOM 12.32	1317	N	LEU	365	16.851	49.560	79.447	1.00
	ATOM 14.67	1319	CA	LEU	365	17.519	49.247	78.203	1.00
	ATOM 12.87	1320	CB	LEU	365	16.595	49.479	77.026	1.00
30	ATOM 11.40	1321	CG	LEU	365	17.089	49.116	75.630	1.00
	ATOM 14.03	1322	CD1	LEU	365	17.468	47.618	75.584	1.00
	ATOM 7.20	1323	CD2	LEU	365	16.067	49.428	74.583	1.00
35	ATOM 19.62	1324	C	LEU	365	18.831	50.090	78.034	1.00
	ATOM 21.35	1325	O	LEU	365	18.811	51.329	77.861	1.00
	ATOM 18.38	1326	N	ARG	366	19.948	49.382	78.017	1.00
40	ATOM 18.62	1328	CA	ARG	366	21.273	49.955	77.887	1.00
	ATOM 17.23	1329	CB	ARG	366	21.668	50.625	79.207	1.00
	ATOM 21.00	1330	CG	ARG	366	21.584	49.703	80.386	1.00
45	ATOM 23.24	1331	CD	ARG	366	21.786	50.457	81.719	1.00
	ATOM 29.88	1332	NE	ARG	366	23.106	51.061	81.783	1.00
	ATOM 35.16	1334	CZ	ARG	366	23.437	52.001	82.672	1.00
50	ATOM 34.83	1335	NH1	ARG	366	22.541	52.419	83.566	1.00
	ATOM 35.29	1338	NH2	ARG	366	24.663	52.527	82.653	1.00

	ATOM	1341	C	ARG	366	22.244	48.773	77.568	1.00
	19.27								
	ATOM	1342	O	ARG	366	21.917	47.574	77.794	1.00
	18.61								
5	ATOM	1343	N	ALA	367	23.420	49.085	77.066	1.00
	17.16								
	ATOM	1345	CA	ALA	367	24.361	48.059	76.699	1.00
	14.91								
10	ATOM	1346	CB	ALA	367	25.589	48.643	76.078	1.00
	15.47								
	ATOM	1347	C	ALA	367	24.738	47.110	77.830	1.00
	15.64								
	ATOM	1348	O	ALA	367	25.034	45.945	77.562	1.00
	16.83								
15	ATOM	1349	N	ALA	368	24.702	47.574	79.072	1.00
	13.84								
	ATOM	1351	CA	ALA	368	25.020	46.728	80.192	1.00
	14.87								
	ATOM	1352	CB	ALA	368	25.095	47.516	81.477	1.00
20	12.42								
	ATOM	1353	C	ALA	368	23.978	45.603	80.353	1.00
	18.21								
	ATOM	1354	O	ALA	368	24.299	44.532	80.936	1.00
	19.57								
25	ATOM	1355	N	ASN	369	22.773	45.840	79.835	1.00
	16.57								
	ATOM	1357	CA	ASN	369	21.707	44.868	79.962	1.00
	17.13								
30	ATOM	1358	CB	ASN	369	20.457	45.543	80.521	1.00
	17.43								
	ATOM	1359	CG	ASN	369	20.656	45.924	81.965	1.00
	18.16								
	ATOM	1360	OD1	ASN	369	21.446	45.275	82.672	1.00
	18.99								
35	ATOM	1361	ND2	ASN	369	19.982	46.986	82.416	1.00
	20.31								
	ATOM	1364	C	ASN	369	21.429	44.042	78.706	1.00
	17.54								
	ATOM	1365	O	ASN	369	20.324	43.535	78.510	1.00
40	20.01								
	ATOM	1366	N	ILE	370	22.392	44.022	77.805	1.00
	16.12								
	ATOM	1368	CA	ILE	370	22.285	43.213	76.621	1.00
	15.43								
45	ATOM	1369	CB	ILE	370	22.616	43.996	75.347	1.00
	13.08								
	ATOM	1370	CG2	ILE	370	22.685	43.061	74.163	1.00
	12.36								
	ATOM	1371	CG1	ILE	370	21.605	45.120	75.127	1.00
50	14.37								
	ATOM	1372	CD1	ILE	370	20.119	44.695	75.114	1.00
	15.62								
	ATOM	1373	C	ILE	370	23.389	42.142	76.825	1.00
	16.79								
55	ATOM	1374	O	ILE	370	24.515	42.470	77.255	1.00
	17.04								
	ATOM	1375	N	LEU	371	23.062	40.857	76.617	1.00
	16.45								

5	ATOM 13.91	1377	CA	LEU	371	24.086	39.814	76.783	1.00
	ATOM 11.51	1378	CB	LEU	371	23.629	38.718	77.718	1.00
	ATOM 11.65	1379	CG	LEU	371	23.385	39.151	79.162	1.00
	ATOM 9.30	1380	CD1	LEU	371	23.017	37.974	80.030	1.00
10	ATOM 13.96	1381	CD2	LEU	371	24.623	39.845	79.736	1.00
	ATOM 15.55	1382	C	LEU	371	24.515	39.273	75.435	1.00
	ATOM 14.88	1383	O	LEU	371	23.743	39.310	74.498	1.00
15	ATOM 16.05	1384	N	VAL	372	25.753	38.805	75.323	1.00
	ATOM 16.97	1386	CA	VAL	372	26.276	38.352	74.048	1.00
	ATOM 15.86	1387	CB	VAL	372	27.483	39.238	73.661	1.00
20	ATOM 14.22	1388	CG1	VAL	372	28.019	38.915	72.278	1.00
	ATOM 16.22	1389	CG2	VAL	372	27.015	40.717	73.765	1.00
	ATOM 19.00	1390	C	VAL	372	26.662	36.860	74.136	1.00
25	ATOM 16.67	1391	O	VAL	372	27.310	36.425	75.091	1.00
	ATOM 17.20	1392	N	SER	373	26.176	36.084	73.171	1.00
	ATOM 16.49	1394	CA	SER	373	26.443	34.661	73.173	1.00
30	ATOM 9.61	1395	CB	SER	373	25.401	33.903	72.382	1.00
	ATOM 12.51	1396	OG	SER	373	25.609	34.133	71.002	1.00
	ATOM 19.20	1398	C	SER	373	27.818	34.328	72.567	1.00
35	ATOM 18.05	1399	O	SER	373	28.515	35.194	71.993	1.00
	ATOM 19.95	1400	N	ASP	374	28.132	33.030	72.589	1.00
	ATOM 20.00	1402	CA	ASP	374	29.372	32.544	72.033	1.00
40	ATOM 26.17	1403	CB	ASP	374	29.589	31.078	72.391	1.00
	ATOM 31.48	1404	CG	ASP	374	28.545	30.163	71.772	1.00
	ATOM 38.05	1405	OD1	ASP	374	27.331	30.389	71.978	1.00
45	ATOM 34.24	1406	OD2	ASP	374	28.943	29.237	71.042	1.00
	ATOM 20.11	1407	C	ASP	374	29.393	32.722	70.530	1.00
	ATOM 20.54	1408	O	ASP	374	30.473	32.770	69.956	1.00
55	ATOM 19.69	1409	N	THR	375	28.233	32.821	69.871	1.00

5	ATOM 19.16	1411	CA	THR	375	28.237	33.030	68.402	1.00
	ATOM 18.19	1412	CB	THR	375	27.161	32.200	67.721	1.00
	ATOM 21.03	1413	OG1	THR	375	25.884	32.473	68.337	1.00
	ATOM 22.62	1415	CG2	THR	375	27.480	30.704	67.854	1.00
10	ATOM 18.52	1416	C	THR	375	28.050	34.530	68.047	1.00
	ATOM 16.67	1417	O	THR	375	27.761	34.892	66.912	1.00
	ATOM 17.98	1418	N	LEU	376	28.207	35.375	69.055	1.00
	ATOM 19.87	1420	CA	LEU	376	28.055	36.815	68.877	1.00
20	ATOM 16.55	1421	CB	LEU	376	29.050	37.365	67.846	1.00
	ATOM 19.39	1422	CG	LEU	376	30.530	37.043	68.128	1.00
	ATOM 17.27	1423	CD1	LEU	376	31.407	38.002	67.298	1.00
	ATOM 18.10	1424	CD2	LEU	376	30.879	37.163	69.594	1.00
25	ATOM 19.40	1425	C	LEU	376	26.628	37.226	68.523	1.00
	ATOM 20.81	1426	O	LEU	376	26.403	38.075	67.668	1.00
	ATOM 17.62	1427	N	SER	377	25.674	36.563	69.154	1.00
	ATOM 16.30	1429	CA	SER	377	24.280	36.930	68.974	1.00
35	ATOM 10.40	1430	CB	SER	377	23.370	35.697	68.723	1.00
	ATOM 11.26	1431	OG	SER	377	23.443	34.763	69.780	1.00
	ATOM 16.38	1433	C	SER	377	23.928	37.681	70.273	1.00
	ATOM 14.77	1434	O	SER	377	24.550	37.456	71.330	1.00
45	ATOM 16.82	1435	N	CYS	378	22.993	38.632	70.165	1.00
	ATOM 17.69	1437	CA	CYS	378	22.615	39.439	71.319	1.00
	ATOM 18.25	1438	CB	CYS	378	22.723	40.941	70.982	1.00
	ATOM 15.71	1439	SG	CYS	378	24.427	41.428	70.519	1.00
50	ATOM 15.25	1440	C	CYS	378	21.252	39.151	71.879	1.00
	ATOM 15.90	1441	O	CYS	378	20.327	38.899	71.148	1.00
	ATOM 15.87	1442	N	LYS	379	21.130	39.258	73.195	1.00
	ATOM 15.83	1444	CA	LYS	379	19.873	39.054	73.836	1.00
55	ATOM 15.60	1445	CB	LYS	379	19.812	37.666	74.496	1.00

	ATOM	1446	CG	LYS	379	20.037	36.561	73.480	1.00
	19.59								
	ATOM	1447	CD	LYS	379	19.703	35.184	74.000	1.00
	16.05								
5	ATOM	1448	CE	LYS	379	20.029	34.207	72.859	1.00
	16.48								
	ATOM	1449	NZ	LYS	379	19.249	32.982	72.931	1.00
	14.49								
10	ATOM	1453	C	LYS	379	19.584	40.120	74.910	1.00
	15.54								
	ATOM	1454	O	LYS	379	20.485	40.554	75.630	1.00
	14.31								
	ATOM	1455	N	ILE	380	18.295	40.466	75.022	1.00
	14.13								
15	ATOM	1457	CA	ILE	380	17.854	41.414	76.044	1.00
	11.75								
	ATOM	1458	CB	ILE	380	16.375	41.897	75.825	1.00
	14.77								
	ATOM	1459	CG2	ILE	380	16.038	43.003	76.826	1.00
20	12.38								
	ATOM	1460	CG1	ILE	380	16.131	42.369	74.372	1.00
	12.86								
	ATOM	1461	CD1	ILE	380	17.049	43.459	73.920	1.00
	15.77								
25	ATOM	1462	C	ILE	380	17.899	40.623	77.352	1.00
	12.43								
	ATOM	1463	O	ILE	380	17.428	39.476	77.425	1.00
	11.43								
30	ATOM	1464	N	ALA	381	18.410	41.245	78.388	1.00
	12.03								
	ATOM	1466	CA	ALA	381	18.540	40.652	79.684	1.00
	13.59								
	ATOM	1467	CB	ALA	381	19.984	40.229	79.914	1.00
	12.83								
35	ATOM	1468	C	ALA	381	18.103	41.691	80.759	1.00
	16.54								
	ATOM	1469	O	ALA	381	17.777	42.833	80.432	1.00
	17.99								
40	ATOM	1470	N	ASP	382	18.145	41.285	82.023	1.00
	17.83								
	ATOM	1472	CA	ASP	382	17.758	42.113	83.173	1.00
	22.61								
	ATOM	1473	CB	ASP	382	18.782	43.206	83.523	1.00
	24.19								
45	ATOM	1474	CG	ASP	382	18.593	43.704	84.956	1.00
	28.24								
	ATOM	1475	OD1	ASP	382	17.492	43.502	85.538	1.00
	29.43								
	ATOM	1476	OD2	ASP	382	19.545	44.237	85.533	1.00
50	33.21								
	ATOM	1477	C	ASP	382	16.346	42.720	83.100	1.00
	23.47								
	ATOM	1478	O	ASP	382	16.156	43.929	82.857	1.00
	26.04								
55	ATOM	1479	N	PHE	383	15.374	41.876	83.437	1.00
	20.99								
	ATOM	1481	CA	PHE	383	13.971	42.238	83.431	1.00
	17.65								

5	ATOM	1482	CB	PHE	383	13.146	41.066	82.908	1.00
	15.74								
	ATOM	1483	CG	PHE	383	13.539	40.611	81.531	1.00
10	11.79								
	ATOM	1484	CD1	PHE	383	13.033	41.254	80.412	1.00
	10.41								
15	ATOM	1485	CD2	PHE	383	14.474	39.598	81.355	1.00
	6.82								
	ATOM	1486	CE1	PHE	383	13.449	40.906	79.140	1.00
20	10.63								
	ATOM	1487	CE2	PHE	383	14.900	39.245	80.081	1.00
	7.13								
25	ATOM	1488	CZ	PHE	383	14.401	39.887	78.985	1.00
	7.27								
	ATOM	1489	C	PHE	383	13.441	42.694	84.793	1.00
30	18.53								
	ATOM	1490	O	PHE	383	12.226	42.734	85.010	1.00
	18.76								
35	ATOM	1491	N	GLY	384	14.340	43.042	85.696	1.00
	19.19								
	ATOM	1493	CA	GLY	384	13.939	43.509	87.021	1.00
40	21.04								
	ATOM	1494	C	GLY	384	12.973	44.703	87.032	1.00
	22.23								
45	ATOM	1495	O	GLY	384	12.091	44.791	87.890	1.00
	22.56								
	ATOM	1496	N	LEU	385	13.121	45.606	86.060	1.00
50	21.19								
	ATOM	1498	CA	LEU	385	12.234	46.774	86.004	1.00
	21.56								
55	ATOM	1499	CB	LEU	385	13.032	48.048	85.706	1.00
	19.23								
	ATOM	1500	CG	LEU	385	13.985	48.510	86.806	1.00
60	19.18								
	ATOM	1501	CD1	LEU	385	14.780	49.751	86.306	1.00
	21.36								
65	ATOM	1502	CD2	LEU	385	13.200	48.842	88.046	1.00
	14.38								
	ATOM	1503	C	LEU	385	11.150	46.625	84.962	1.00
70	20.62								
	ATOM	1504	O	LEU	385	10.322	47.522	84.802	1.00
	21.37								
75	ATOM	1505	N	ALA	386	11.191	45.528	84.211	1.00
	21.92								
	ATOM	1507	CA	ALA	386	10.208	45.302	83.150	1.00
80	22.38								
	ATOM	1508	CB	ALA	386	10.536	44.062	82.366	1.00
	21.60								
85	ATOM	1509	C	ALA	386	8.781	45.234	83.718	1.00
	22.56								
	ATOM	1510	O	ALA	386	8.565	44.759	84.837	1.00
90	22.02								
	ATOM	1511	N	ARG	387	7.815	45.709	82.937	1.00
	22.00								
95	ATOM	1513	CA	ARG	387	6.418	45.730	83.394	1.00
	21.42								
	ATOM	1514	CB	ARG	387	6.052	47.080	84.021	1.00
	20.93								

	ATOM	1515	CG	ARG	387	6.878	47.511	85.195	1.00
	22.36								
	ATOM	1516	CD	ARG	387	6.644	46.657	86.383	1.00
	20.81								
5	ATOM	1517	NE	ARG	387	7.346	47.194	87.533	1.00
	22.93								
	ATOM	1519	CZ	ARG	387	8.504	46.731	87.993	1.00
	26.61								
10	ATOM	1520	NH1	ARG	387	9.108	45.704	87.388	1.00
	26.75								
	ATOM	1523	NH2	ARG	387	9.044	47.253	89.088	1.00
	25.49								
	ATOM	1526	C	ARG	387	5.411	45.490	82.282	1.00
	20.65								
15	ATOM	1527	O	ARG	387	5.638	45.837	81.108	1.00
	15.93								
	ATOM	1528	N	LEU	388	4.299	44.859	82.655	1.00
	22.37								
	ATOM	1530	CA	LEU	388	3.256	44.638	81.689	1.00
20	25.26								
	ATOM	1531	CB	LEU	388	2.387	43.430	82.041	1.00
	27.00								
	ATOM	1532	CG	LEU	388	1.550	43.223	80.779	1.00
	25.08								
25	ATOM	1533	CD1	LEU	388	1.705	41.941	79.981	1.00
	26.36								
	ATOM	1534	CD2	LEU	388	0.247	43.295	81.355	1.00
	25.06								
	ATOM	1535	C	LEU	388	2.457	45.939	81.683	1.00
30	26.73								
	ATOM	1536	O	LEU	388	2.148	46.495	82.723	1.00
	25.72								
	ATOM	1537	N	ILE	389	2.160	46.425	80.496	1.00
	29.26								
35	ATOM	1539	CA	ILE	389	1.470	47.676	80.350	1.00
	34.27								
	ATOM	1540	CB	ILE	389	2.196	48.499	79.297	1.00
	35.09								
	ATOM	1541	CG2	ILE	389	1.467	49.722	78.935	1.00
40	36.03								
	ATOM	1542	CG1	ILE	389	3.563	48.869	79.864	1.00
	36.24								
	ATOM	1543	CD1	ILE	389	3.507	49.506	81.264	1.00
	33.80								
45	ATOM	1544	C	ILE	389	0.018	47.434	80.058	1.00
	37.44								
	ATOM	1545	O	ILE	389	-0.390	47.106	78.946	1.00
	38.29								
	ATOM	1546	N	GLU	390	-0.765	47.653	81.088	1.00
50	40.80								
	ATOM	1548	CA	GLU	390	-2.186	47.422	81.022	1.00
	46.41								
	ATOM	1549	CB	GLU	390	-2.712	47.356	82.459	1.00
	48.77								
55	ATOM	1550	CG	GLU	390	-1.681	46.711	83.434	1.00
	51.74								
	ATOM	1551	CD	GLU	390	-1.810	45.193	83.740	1.00
	55.50								

	ATOM	1552	OE1	GLU	390	-2.641	44.416	83.175	1.00
	57.31								
	ATOM	1553	OE2	GLU	390	-0.984	44.799	84.598	1.00
	56.71								
5	ATOM	1554	C	GLU	390	-2.896	48.444	80.068	1.00
	48.64								
	ATOM	1555	O	GLU	390	-3.560	48.015	79.119	1.00
	50.05								
10	ATOM	1556	N	ASP	391	-2.589	49.746	80.236	1.00
	49.94								
	ATOM	1558	CA	ASP	391	-3.062	50.943	79.463	1.00
	52.09								
	ATOM	1559	CB	ASP	391	-3.704	51.868	80.517	1.00
	53.43								
15	ATOM	1560	CG	ASP	391	-5.190	51.599	80.683	1.00
	54.64								
	ATOM	1561	OD1	ASP	391	-5.816	51.546	79.605	1.00
	57.00								
20	ATOM	1562	OD2	ASP	391	-5.720	51.446	81.813	1.00
	55.68								
	ATOM	1563	C	ASP	391	-1.720	51.530	78.813	1.00
	54.45								
	ATOM	1564	O	ASP	391	-0.734	50.989	79.216	1.00
	57.78								
25	ATOM	1565	N	ASN	392	-1.601	52.563	77.923	1.00
	54.74								
	ATOM	1567	CA	ASN	392	-0.222	53.004	77.344	1.00
	54.25								
30	ATOM	1568	CB	ASN	392	-0.281	54.412	76.624	1.00
	57.84								
	ATOM	1569	CG	ASN	392	0.774	54.671	75.390	1.00
	61.35								
	ATOM	1570	OD1	ASN	392	1.285	53.777	74.659	1.00
	63.64								
35	ATOM	1571	ND2	ASN	392	0.926	55.982	75.103	1.00
	64.17								
	ATOM	1574	C	ASN	392	0.909	53.201	78.360	1.00
	51.44								
40	ATOM	1575	O	ASN	392	2.071	53.027	78.005	1.00
	50.36								
	ATOM	1576	N	GLU	393	0.598	53.413	79.630	1.00
	48.28								
	ATOM	1578	CA	GLU	393	1.703	53.844	80.469	1.00
	46.79								
45	ATOM	1579	CB	GLU	393	1.505	55.343	80.475	1.00
	46.89								
	ATOM	1580	CG	GLU	393	2.546	56.345	80.691	1.00
	46.44								
	ATOM	1581	CD	GLU	393	1.801	57.659	80.529	1.00
50	46.39								
	ATOM	1582	OE1	GLU	393	1.063	58.050	81.476	1.00
	45.21								
	ATOM	1583	OE2	GLU	393	1.773	58.175	79.384	1.00
	45.38								
55	ATOM	1584	C	GLU	393	1.852	53.352	81.891	1.00
	46.03								
	ATOM	1585	O	GLU	393	0.867	53.073	82.583	1.00
	47.03								



	ATOM	1586	N	TYR	394	3.106	53.298	82.336	1.00
	43.40								
	ATOM	1588	CA	TYR	394	3.368	52.883	83.697	1.00
	40.15								
5	ATOM	1589	CB	TYR	394	4.177	51.595	83.765	1.00
	38.62								
	ATOM	1590	CG	TYR	394	4.416	51.044	85.153	1.00
	38.07								
10	ATOM	1591	CD1	TYR	394	5.245	51.714	86.025	1.00
	39.62								
	ATOM	1592	CE1	TYR	394	5.630	51.162	87.222	1.00
	42.24								
	ATOM	1593	CD2	TYR	394	3.946	49.783	85.532	1.00
	40.01								
15	ATOM	1594	CE2	TYR	394	4.328	49.204	86.751	1.00
	40.87								
	ATOM	1595	CZ	TYR	394	5.186	49.907	87.591	1.00
	43.04								
	ATOM	1596	OH	TYR	394	5.669	49.391	88.778	1.00
20	46.90								
	ATOM	1598	C	TYR	394	4.027	54.037	84.428	1.00
	40.06								
	ATOM	1599	O	TYR	394	5.016	54.637	83.968	1.00
	40.48								
25	ATOM	1600	N	THR	395	3.494	54.314	85.605	1.00
	40.62								
	ATOM	1602	CA	THR	395	3.996	55.420	86.394	1.00
	39.68								
	ATOM	1603	CB	THR	395	2.833	56.407	86.622	1.00
30	36.39								
	ATOM	1604	OG1	THR	395	2.416	56.900	85.345	1.00
	35.31								
	ATOM	1606	CG2	THR	395	3.269	57.568	87.421	1.00
	34.94								
35	ATOM	1607	C	THR	395	4.793	55.021	87.646	1.00
	40.23								
	ATOM	1608	O	THR	395	4.261	54.422	88.561	1.00
	42.34								
	ATOM	1609	N	ALA	396	6.094	55.301	87.652	1.00
40	40.72								
	ATOM	1611	CA	ALA	396	6.936	54.917	88.793	1.00
	42.94								
	ATOM	1612	CB	ALA	396	8.401	55.095	88.459	1.00
	42.40								
45	ATOM	1613	C	ALA	396	6.652	55.661	90.064	1.00
	45.64								
	ATOM	1614	O	ALA	396	5.918	56.635	90.044	1.00
	47.05								
	ATOM	1615	N	ARG	397	7.312	55.274	91.152	1.00
50	48.85								
	ATOM	1617	CA	ARG	397	7.118	55.986	92.409	1.00
	52.23								
	ATOM	1618	CB	ARG	397	7.631	55.177	93.578	1.00
	51.92								
55	ATOM	1619	CG	ARG	397	7.441	55.909	94.893	1.00
	56.10								
	ATOM	1620	CD	ARG	397	7.539	54.933	96.067	1.00
	57.82								

	ATOM	1621	NE	ARG	397	7.418	55.586	97.366	1.00
	56.39								
	ATOM	1623	CZ	ARG	397	6.985	54.972	98.459	1.00
	55.20								
5	ATOM	1624	NH1	ARG	397	6.624	53.694	98.400	1.00
	53.82								
	ATOM	1627	NH2	ARG	397	6.934	55.634	99.602	1.00
	55.03								
10	ATOM	1630	C	ARG	397	7.816	57.358	92.363	1.00
	54.99								
	ATOM	1631	O	ARG	397	8.851	57.505	91.714	1.00
	55.96								
	ATOM	1632	N	GLU	398	7.239	58.380	92.988	1.00
	56.91								
15	ATOM	1634	CA	GLU	398	7.884	59.688	92.932	1.00
	59.37								
	ATOM	1635	CB	GLU	398	7.106	60.765	93.703	1.00
	62.54								
20	ATOM	1636	CG	GLU	398	5.719	61.103	93.140	1.00
	66.92								
	ATOM	1637	CD	GLU	398	5.758	61.532	91.681	1.00
	70.31								
	ATOM	1638	OE1	GLU	398	6.843	61.954	91.212	1.00
	74.49								
25	ATOM	1639	OE2	GLU	398	4.703	61.414	91.022	1.00
	71.70								
	ATOM	1640	C	GLU	398	9.298	59.578	93.469	1.00
	59.04								
30	ATOM	1641	O	GLU	398	10.211	60.249	92.988	1.00
	58.64								
	ATOM	1642	N	GLY	399	9.482	58.692	94.444	1.00
	57.92								
	ATOM	1644	CA	GLY	399	10.799	58.527	95.010	1.00
	55.73								
35	ATOM	1645	C	GLY	399	11.724	57.759	94.081	1.00
	53.26								
	ATOM	1646	O	GLY	399	12.920	57.684	94.327	1.00
	54.49								
40	ATOM	1647	N	ALA	400	11.182	57.195	93.011	1.00
	50.53								
	ATOM	1649	CA	ALA	400	12.004	56.401	92.092	1.00
	49.36								
	ATOM	1650	CB	ALA	400	11.126	55.624	91.107	1.00
	47.55								
45	ATOM	1651	C	ALA	400	12.988	57.254	91.331	1.00
	48.46								
	ATOM	1652	O	ALA	400	12.627	58.312	90.838	1.00
	51.06								
50	ATOM	1653	N	ALA	401	14.170	56.724	91.100	1.00
	46.01								
	ATOM	1655	CA	ALA	401	15.170	57.496	90.478	1.00
	44.15								
	ATOM	1656	CB	ALA	401	16.096	57.908	91.591	1.00
	45.07								
55	ATOM	1657	C	ALA	401	15.864	56.589	89.359	1.00
	41.57								
	ATOM	1658	O	ALA	401	16.039	55.375	89.578	1.00
	40.99								

	ATOM 38.21	1659	N	PHE	402	16.052	57.085	88.130	1.00
	ATOM 35.49	1661	CA	PHE	402	16.627	56.248	87.072	1.00
5	ATOM 35.98	1662	CB	PHE	402	15.606	55.988	85.941	1.00
	ATOM 39.61	1663	CG	PHE	402	14.368	55.247	86.382	1.00
10	ATOM 40.06	1664	CD1	PHE	402	14.299	53.843	86.361	1.00
	ATOM 41.14	1665	CD2	PHE	402	13.289	55.959	86.919	1.00
	ATOM 40.16	1666	CE1	PHE	402	13.161	53.164	86.893	1.00
15	ATOM 40.96	1667	CE2	PHE	402	12.155	55.293	87.446	1.00
	ATOM 41.14	1668	CZ	PHE	402	12.098	53.899	87.436	1.00
20	ATOM 34.30	1669	C	PHE	402	17.865	56.933	86.483	1.00
	ATOM 36.67	1670	O	PHE	402	18.058	58.136	86.674	1.00
	ATOM 30.75	1671	N	PRO	403	18.722	56.166	85.781	1.00
25	ATOM 30.65	1672	CD	PRO	403	18.577	54.718	85.543	1.00
	ATOM 28.50	1673	CA	PRO	403	19.951	56.689	85.159	1.00
30	ATOM 29.37	1674	CB	PRO	403	20.524	55.465	84.409	1.00
	ATOM 30.78	1675	CG	PRO	403	19.990	54.288	85.229	1.00
	ATOM 26.46	1676	C	PRO	403	19.567	57.772	84.181	1.00
35	ATOM 26.61	1677	O	PRO	403	18.963	57.493	83.152	1.00
	ATOM 24.48	1678	N	ILE	404	19.941	59.004	84.496	1.00
40	ATOM 20.10	1680	CA	ILE	404	19.627	60.141	83.673	1.00
	ATOM 22.53	1681	CB	ILE	404	20.211	61.446	84.297	1.00
	ATOM 19.44	1682	CG2	ILE	404	20.006	62.648	83.363	1.00
45	ATOM 24.54	1683	CG1	ILE	404	19.574	61.677	85.652	1.00
	ATOM 27.14	1684	CD1	ILE	404	18.040	61.803	85.603	1.00
50	ATOM 18.42	1685	C	ILE	404	20.051	60.036	82.228	1.00
	ATOM 19.08	1686	O	ILE	404	19.273	60.342	81.342	1.00
	ATOM 19.47	1687	N	LYS	405	21.274	59.613	81.968	1.00
55	ATOM 17.69	1689	CA	LYS	405	21.741	59.560	80.575	1.00
	ATOM 19.78	1690	CB	LYS	405	23.244	59.319	80.543	1.00

	ATOM	1691	CG	LYS	405	24.007	60.419	81.214	1.00
	20.91								
	ATOM	1692	CD	LYS	405	25.504	60.285	81.004	1.00
	25.68								
5	ATOM	1693	CE	LYS	405	26.228	61.491	81.594	1.00
	25.97								
	ATOM	1694	NZ	LYS	405	27.619	61.628	81.058	1.00
	30.78								
10	ATOM	1698	C	LYS	405	21.024	58.584	79.649	1.00
	17.59								
	ATOM	1699	O	LYS	405	20.997	58.781	78.447	1.00
	17.74								
	ATOM	1700	N	TRP	406	20.439	57.533	80.198	1.00
	17.75								
15	ATOM	1702	CA	TRP	406	19.742	56.538	79.383	1.00
	18.37								
	ATOM	1703	CB	TRP	406	20.066	55.132	79.897	1.00
	19.40								
20	ATOM	1704	CG	TRP	406	21.359	54.653	79.472	1.00
	18.94								
	ATOM	1705	CD2	TRP	406	22.628	54.844	80.122	1.00
	19.38								
	ATOM	1706	CE2	TRP	406	23.589	54.168	79.342	1.00
	18.92								
25	ATOM	1707	CE3	TRP	406	23.035	55.510	81.292	1.00
	17.63								
	ATOM	1708	CD1	TRP	406	21.603	53.907	78.360	1.00
	18.56								
30	ATOM	1709	NE1	TRP	406	22.938	53.613	78.272	1.00
	18.76								
	ATOM	1711	CZ2	TRP	406	24.934	54.135	79.684	1.00
	18.38								
	ATOM	1712	CZ3	TRP	406	24.373	55.472	81.631	1.00
	18.43								
35	ATOM	1713	CH2	TRP	406	25.313	54.790	80.827	1.00
	20.51								
	ATOM	1714	C	TRP	406	18.221	56.667	79.414	1.00
	20.12								
40	ATOM	1715	O	TRP	406	17.529	56.117	78.571	1.00
	19.54								
	ATOM	1716	N	THR	407	17.701	57.377	80.400	1.00
	21.90								
	ATOM	1718	CA	THR	407	16.273	57.481	80.565	1.00
	20.95								
45	ATOM	1719	CB	THR	407	15.975	57.565	82.053	1.00
	21.49								
	ATOM	1720	OG1	THR	407	16.572	56.449	82.731	1.00
	21.33								
50	ATOM	1722	CG2	THR	407	14.463	57.568	82.320	1.00
	20.08								
	ATOM	1723	C	THR	407	15.595	58.637	79.784	1.00
	21.99								
	ATOM	1724	O	THR	407	16.066	59.766	79.777	1.00
	21.47								
55	ATOM	1725	N	ALA	408	14.453	58.355	79.160	1.00
	21.85								
	ATOM	1727	CA	ALA	408	13.698	59.383	78.403	1.00
	21.61								

5	ATOM 22.58	1728	CB	ALA	408	12.470	58.761	77.725	1.00
	ATOM 21.12	1729	C	ALA	408	13.260	60.533	79.311	1.00
	ATOM 22.30	1730	O	ALA	408	12.942	60.343	80.479	1.00
10	ATOM 22.37	1731	N	PRO	409	13.197	61.739	78.768	1.00
	ATOM 21.70	1732	CD	PRO	409	13.479	62.088	77.367	1.00
	ATOM 22.65	1733	CA	PRO	409	12.799	62.939	79.540	1.00
15	ATOM 21.61	1734	CB	PRO	409	12.767	64.041	78.477	1.00
	ATOM 21.10	1735	CG	PRO	409	13.763	63.578	77.460	1.00
	ATOM 23.34	1736	C	PRO	409	11.448	62.800	80.264	1.00
20	ATOM 23.23	1737	O	PRO	409	11.357	63.092	81.452	1.00
	ATOM 24.26	1738	N	GLU	410	10.435	62.271	79.586	1.00
	ATOM 23.57	1740	CA	GLU	410	9.136	62.137	80.239	1.00
25	ATOM 23.95	1741	CB	GLU	410	8.043	61.687	79.274	1.00
	ATOM 25.44	1742	CG	GLU	410	8.173	60.240	78.775	1.00
	ATOM 27.31	1743	CD	GLU	410	9.123	60.042	77.597	1.00
30	ATOM 26.56	1744	OE1	GLU	410	9.817	60.995	77.159	1.00
	ATOM 27.58	1745	OE2	GLU	410	9.158	58.915	77.064	1.00
	ATOM 24.83	1746	C	GLU	410	9.210	61.207	81.415	1.00
35	ATOM 28.35	1747	O	GLU	410	8.489	61.424	82.394	1.00
	ATOM 24.70	1748	N	ALA	411	10.090	60.204	81.361	1.00
	ATOM 24.06	1750	CA	ALA	411	10.232	59.291	82.489	1.00
40	ATOM 23.48	1751	CB	ALA	411	10.948	58.015	82.063	1.00
	ATOM 22.89	1752	C	ALA	411	10.989	59.983	83.600	1.00
	ATOM 23.57	1753	O	ALA	411	10.670	59.809	84.759	1.00
45	ATOM 23.82	1754	N	ILE	412	12.036	60.730	83.251	1.00
	ATOM 24.62	1756	CA	ILE	412	12.805	61.463	84.279	1.00
	ATOM 26.65	1757	CB	ILE	412	14.035	62.160	83.657	1.00
50	ATOM 24.30	1758	CG2	ILE	412	14.670	63.166	84.650	1.00
	ATOM 26.80	1759	CG1	ILE	412	15.068	61.128	83.198	1.00

	ATOM	1760	CD1	ILE	412	16.199	61.747	82.363	1.00
	29.02								
	ATOM	1761	C	ILE	412	11.929	62.559	84.948	1.00
	23.45								
5	ATOM	1762	O	ILE	412	11.891	62.693	86.161	1.00
	21.71								
	ATOM	1763	N	ASN	413	11.191	63.292	84.129	1.00
	23.22								
10	ATOM	1765	CA	ASN	413	10.351	64.386	84.611	1.00
	27.01								
	ATOM	1766	CB	ASN	413	10.090	65.380	83.455	1.00
	25.92								
	ATOM	1767	CG	ASN	413	11.326	66.208	83.129	1.00
	25.74								
15	ATOM	1768	OD1	ASN	413	12.269	66.197	83.880	1.00
	27.88								
	ATOM	1769	ND2	ASN	413	11.268	66.991	82.074	1.00
	28.60								
20	ATOM	1772	C	ASN	413	9.013	64.013	85.297	1.00
	28.43								
	ATOM	1773	O	ASN	413	8.657	64.566	86.337	1.00
	28.15								
	ATOM	1774	N	TYR	414	8.315	63.038	84.722	1.00
	30.08								
25	ATOM	1776	CA	TYR	414	7.026	62.645	85.253	1.00
	30.85								
	ATOM	1777	CB	TYR	414	5.985	62.791	84.173	1.00
	29.88								
30	ATOM	1778	CG	TYR	414	6.134	64.027	83.348	1.00
	32.03								
	ATOM	1779	CD1	TYR	414	6.387	65.269	83.946	1.00
	33.46								
	ATOM	1780	CE1	TYR	414	6.507	66.424	83.184	1.00
	33.49								
35	ATOM	1781	CD2	TYR	414	6.012	63.984	81.971	1.00
	33.51								
	ATOM	1782	CE2	TYR	414	6.130	65.131	81.202	1.00
	34.46								
40	ATOM	1783	CZ	TYR	414	6.376	66.344	81.814	1.00
	35.28								
	ATOM	1784	OH	TYR	414	6.487	67.473	81.042	1.00
	37.44								
	ATOM	1786	C	TYR	414	6.946	61.239	85.810	1.00
	30.61								
45	ATOM	1787	O	TYR	414	5.931	60.884	86.397	1.00
	32.49								
	ATOM	1788	N	GLY	415	8.002	60.450	85.633	1.00
	29.99								
50	ATOM	1790	CA	GLY	415	7.966	59.086	86.132	1.00
	28.82								
	ATOM	1791	C	GLY	415	7.089	58.242	85.206	1.00
	28.52								
	ATOM	1792	O	GLY	415	6.753	57.092	85.481	1.00
	27.98								
55	ATOM	1793	N	THR	416	6.798	58.817	84.057	1.00
	27.94								
	ATOM	1795	CA	THR	416	5.954	58.204	83.076	1.00
	29.92								

5	ATOM 32.60	1796	CB	THR	416	5.011	59.322	82.598	1.00
	ATOM 37.83	1797	OG1	THR	416	3.682	58.995	83.011	1.00
	ATOM 34.29	1799	CG2	THR	416	5.107	59.645	81.141	1.00
	ATOM 28.19	1800	C	THR	416	6.735	57.382	81.997	1.00
10	ATOM 28.30	1801	O	THR	416	7.563	57.923	81.263	1.00
	ATOM 25.95	1802	N	PHE	417	6.534	56.058	81.996	1.00
	ATOM 22.72	1804	CA	PHE	417	7.252	55.157	81.088	1.00
15	ATOM 22.06	1805	CB	PHE	417	7.960	54.053	81.929	1.00
	ATOM 19.89	1806	CG	PHE	417	9.240	54.463	82.623	1.00
20	ATOM 20.48	1807	CD1	PHE	417	10.423	54.495	81.896	1.00
	ATOM 19.95	1808	CD2	PHE	417	9.318	54.638	84.014	1.00
	ATOM 18.79	1809	CE1	PHE	417	11.633	54.672	82.495	1.00
25	ATOM 20.32	1810	CE2	PHE	417	10.607	54.820	84.620	1.00
	ATOM 20.05	1811	CZ	PHE	417	11.732	54.828	83.830	1.00
30	ATOM 21.56	1812	C	PHE	417	6.343	54.447	80.051	1.00
	ATOM 20.78	1813	O	PHE	417	5.266	53.981	80.389	1.00
	ATOM 19.69	1814	N	THR	418	6.747	54.431	78.783	1.00
35	ATOM 20.67	1816	CA	THR	418	6.007	53.693	77.764	1.00
	ATOM 20.26	1817	CB	THR	418	5.148	54.590	76.854	1.00
40	ATOM 25.33	1818	OG1	THR	418	6.015	55.312	76.008	1.00
	ATOM 21.05	1820	CG2	THR	418	4.271	55.562	77.684	1.00
	ATOM 20.77	1821	C	THR	418	7.056	52.981	76.873	1.00
45	ATOM 20.46	1822	O	THR	418	8.262	53.163	77.050	1.00
	ATOM 19.91	1823	N	ILE	419	6.628	52.204	75.894	1.00
50	ATOM 19.28	1825	CA	ILE	419	7.596	51.546	75.059	1.00
	ATOM 19.61	1826	CB	ILE	419	6.906	50.615	74.033	1.00
	ATOM 17.68	1827	CG2	ILE	419	6.084	51.447	73.012	1.00
55	ATOM 16.37	1828	CG1	ILE	419	7.932	49.725	73.275	1.00
	ATOM 11.47	1829	CD1	ILE	419	8.633	48.748	74.143	1.00

	ATOM	1830	C	ILE	419	8.439	52.641	74.341	1.00
	20.48								
	ATOM	1831	O	ILE	419	9.552	52.369	73.871	1.00
	19.11								
5	ATOM	1832	N	LYS	420	7.866	53.847	74.198	1.00
	19.01								
	ATOM	1834	CA	LYS	420	8.554	54.973	73.550	1.00
	16.10								
10	ATOM	1835	CB	LYS	420	7.588	56.126	73.250	1.00
	15.15								
	ATOM	1836	CG	LYS	420	6.484	55.787	72.239	1.00
	15.77								
	ATOM	1837	CD	LYS	420	7.047	55.221	70.937	1.00
	14.36								
15	ATOM	1838	CE	LYS	420	5.948	55.081	69.907	1.00
	7.71								
	ATOM	1839	NZ	LYS	420	6.454	54.493	68.641	1.00
	12.60								
20	ATOM	1843	C	LYS	420	9.713	55.474	74.404	1.00
	14.10								
	ATOM	1844	O	LYS	420	10.612	56.062	73.882	1.00
	15.75								
	ATOM	1845	N	SER	421	9.634	55.280	75.719	0.84
	11.80								
25	ATOM	1847	CA	SER	421	10.705	55.605	76.605	0.84
	11.53								
	ATOM	1848	CB	SER	421	10.288	55.456	78.074	0.84
	10.22								
30	ATOM	1849	OG	SER	421	9.162	56.223	78.370	0.84
	13.84								
	ATOM	1851	C	SER	421	11.856	54.618	76.329	0.84
	13.00								
	ATOM	1852	O	SER	421	13.032	54.979	76.449	0.84
	11.53								
35	ATOM	1853	N	ASP	422	11.528	53.348	76.074	1.00
	15.55								
	ATOM	1855	CA	ASP	422	12.561	52.353	75.775	1.00
	14.65								
40	ATOM	1856	CB	ASP	422	11.968	50.948	75.674	1.00
	15.84								
	ATOM	1857	CG	ASP	422	11.668	50.329	77.007	1.00
	17.56								
	ATOM	1858	OD1	ASP	422	12.194	50.768	78.064	1.00
	17.02								
45	ATOM	1859	OD2	ASP	422	10.879	49.371	76.982	1.00
	18.39								
	ATOM	1860	C	ASP	422	13.211	52.708	74.447	1.00
	15.67								
50	ATOM	1861	O	ASP	422	14.403	52.482	74.256	1.00
	18.05								
	ATOM	1862	N	VAL	423	12.419	53.237	73.518	1.00
	14.52								
	ATOM	1864	CA	VAL	423	12.956	53.641	72.215	1.00
	14.96								
55	ATOM	1865	CB	VAL	423	11.852	54.135	71.290	1.00
	13.71								
	ATOM	1866	CG1	VAL	423	12.434	54.804	70.050	1.00
	11.97								



	ATOM 11.91	1867	CG2	VAL	423	10.995	52.940	70.853	1.00
	ATOM 15.31	1868	C	VAL	423	14.042	54.737	72.400	1.00
5	ATOM 16.48	1869	O	VAL	423	15.084	54.665	71.765	1.00
	ATOM 14.64	1870	N	TRP	424	13.786	55.679	73.309	1.00
10	ATOM 16.07	1872	CA	TRP	424	14.778	56.726	73.584	1.00
	ATOM 16.52	1873	CB	TRP	424	14.229	57.698	74.643	1.00
	ATOM 18.45	1874	CG	TRP	424	15.185	58.718	75.027	1.00
15	ATOM 18.79	1875	CD2	TRP	424	15.141	60.102	74.686	1.00
	ATOM 19.83	1876	CE2	TRP	424	16.277	60.700	75.259	1.00
20	ATOM 20.12	1877	CE3	TRP	424	14.239	60.887	73.958	1.00
	ATOM 18.97	1878	CD1	TRP	424	16.312	58.548	75.780	1.00
	ATOM 16.31	1879	NE1	TRP	424	16.961	59.724	75.931	1.00
25	ATOM 20.80	1881	CZ2	TRP	424	16.561	62.081	75.122	1.00
	ATOM 19.39	1882	CZ3	TRP	424	14.506	62.268	73.824	1.00
30	ATOM 19.97	1883	CH2	TRP	424	15.655	62.840	74.397	1.00
	ATOM 12.71	1884	C	TRP	424	16.060	56.041	74.127	1.00
	ATOM 11.08	1885	O	TRP	424	17.176	56.337	73.641	1.00
35	ATOM 8.75	1886	N	SER	425	15.884	55.140	75.103	0.74
	ATOM 10.92	1888	CA	SER	425	17.020	54.421	75.678	0.74
40	ATOM 12.58	1889	CB	SER	425	16.555	53.443	76.749	0.74
	ATOM 14.72	1890	OG	SER	425	15.843	54.097	77.763	0.74
	ATOM 10.97	1892	C	SER	425	17.785	53.651	74.607	0.74
45	ATOM 12.46	1893	O	SER	425	19.010	53.594	74.636	0.74
	ATOM 11.96	1894	N	PHE	426	17.057	53.069	73.661	1.00
50	ATOM 13.86	1896	CA	PHE	426	17.696	52.350	72.579	1.00
	ATOM 11.32	1897	CB	PHE	426	16.674	51.731	71.656	1.00
	ATOM 12.43	1898	CG	PHE	426	17.268	50.930	70.536	1.00
55	ATOM 11.39	1899	CD1	PHE	426	17.850	49.676	70.798	1.00
	ATOM 11.59	1900	CD2	PHE	426	17.279	51.424	69.249	1.00

	ATOM	1901	CE1	PHE	426	18.419	48.961	69.779	1.00
	10.37								
	ATOM	1902	CE2	PHE	426	17.866	50.689	68.215	1.00
	11.36								
5	ATOM	1903	CZ	PHE	426	18.430	49.456	68.498	1.00
	9.95								
	ATOM	1904	C	PHE	426	18.619	53.298	71.807	1.00
	14.91								
10	ATOM	1905	O	PHE	426	19.710	52.881	71.379	1.00
	16.79								
	ATOM	1906	N	GLY	427	18.175	54.530	71.574	1.00
	15.14								
	ATOM	1908	CA	GLY	427	19.005	55.494	70.858	1.00
	16.07								
15	ATOM	1909	C	GLY	427	20.333	55.675	71.592	1.00
	15.29								
	ATOM	1910	O	GLY	427	21.367	55.736	70.961	1.00
	15.59								
	ATOM	1911	N	ILE	428	20.274	55.821	72.915	1.00
	13.04								
20	ATOM	1913	CA	ILE	428	21.435	55.958	73.739	1.00
	13.65								
	ATOM	1914	CB	ILE	428	21.042	56.193	75.213	1.00
	15.69								
25	ATOM	1915	CG2	ILE	428	22.306	56.326	76.077	1.00
	14.46								
	ATOM	1916	CG1	ILE	428	20.175	57.467	75.342	1.00
	17.63								
	ATOM	1917	CD1	ILE	428	20.855	58.757	74.831	1.00
30	15.45								
	ATOM	1918	C	ILE	428	22.304	54.666	73.630	1.00
	16.99								
	ATOM	1919	O	ILE	428	23.523	54.728	73.492	1.00
	14.96								
35	ATOM	1920	N	LEU	429	21.654	53.513	73.675	1.00
	18.20								
	ATOM	1922	CA	LEU	429	22.349	52.229	73.557	1.00
	18.84								
	ATOM	1923	CB	LEU	429	21.344	51.066	73.695	1.00
40	19.87								
	ATOM	1924	CG	LEU	429	21.890	49.653	73.876	1.00
	20.75								
	ATOM	1925	CD1	LEU	429	20.791	48.727	74.436	1.00
	18.75								
45	ATOM	1926	CD2	LEU	429	22.409	49.128	72.549	1.00
	21.10								
	ATOM	1927	C	LEU	429	23.113	52.182	72.238	1.00
	17.14								
	ATOM	1928	O	LEU	429	24.239	51.706	72.197	1.00
50	17.44								
	ATOM	1929	N	LEU	430	22.525	52.706	71.164	1.00
	15.39								
	ATOM	1931	CA	LEU	430	23.241	52.725	69.908	1.00
	15.10								
55	ATOM	1932	CB	LEU	430	22.412	53.360	68.800	1.00
	15.61								
	ATOM	1933	CG	LEU	430	21.155	52.641	68.351	1.00
	18.59								

5	ATOM 14.20	1934	CD1	LEU	430	20.470	53.464	67.278	1.00
	ATOM 16.64	1935	CD2	LEU	430	21.518	51.242	67.828	1.00
	ATOM 16.62	1936	C	LEU	430	24.587	53.492	70.017	1.00
10	ATOM 15.61	1937	O	LEU	430	25.539	53.148	69.330	1.00
	ATOM 19.39	1938	N	THR	431	24.644	54.537	70.847	1.00
	ATOM 19.11	1940	CA	THR	431	25.901	55.294	71.008	1.00
15	ATOM 15.34	1941	CB	THR	431	25.742	56.667	71.758	1.00
	ATOM 12.80	1942	OG1	THR	431	25.465	56.469	73.143	1.00
	ATOM 13.08	1944	CG2	THR	431	24.630	57.456	71.164	1.00
20	ATOM 19.79	1945	C	THR	431	26.909	54.411	71.733	1.00
	ATOM 20.57	1946	O	THR	431	28.105	54.447	71.414	1.00
	ATOM 19.43	1947	N	GLU	432	26.444	53.600	72.693	1.00
25	ATOM 18.07	1949	CA	GLU	432	27.361	52.697	73.389	1.00
	ATOM 19.17	1950	CB	GLU	432	26.665	51.930	74.493	1.00
	ATOM 17.14	1951	CG	GLU	432	26.127	52.805	75.603	1.00
30	ATOM 17.70	1952	CD	GLU	432	25.461	52.018	76.673	1.00
	ATOM 15.03	1953	OE1	GLU	432	24.287	51.671	76.452	1.00
	ATOM 21.38	1954	OE2	GLU	432	26.089	51.738	77.711	1.00
35	ATOM 20.42	1955	C	GLU	432	27.935	51.673	72.387	1.00
	ATOM 21.99	1956	O	GLU	432	29.117	51.311	72.447	1.00
	ATOM 17.57	1957	N	ILE	433	27.124	51.244	71.442	1.00
40	ATOM 17.15	1959	CA	ILE	433	27.610	50.277	70.481	1.00
	ATOM 13.48	1960	CB	ILE	433	26.456	49.748	69.615	1.00
	ATOM 14.99	1961	CG2	ILE	433	26.969	49.056	68.369	1.00
45	ATOM 14.70	1962	CG1	ILE	433	25.569	48.827	70.453	1.00
	ATOM 15.32	1963	CD1	ILE	433	24.356	48.293	69.661	1.00
	ATOM 19.95	1964	C	ILE	433	28.712	50.851	69.583	1.00
50	ATOM 21.11	1965	O	ILE	433	29.805	50.280	69.460	1.00
	ATOM 20.59	1966	N	VAL	434	28.420	51.988	68.953	1.00

5	ATOM 19.04	1968	CA	VAL	434	29.353	52.602	68.038	1.00
	ATOM 19.75	1969	CB	VAL	434	28.610	53.644	67.140	1.00
	ATOM 16.22	1970	CG1	VAL	434	28.609	55.040	67.759	1.00
	ATOM 22.03	1971	CG2	VAL	434	29.164	53.625	65.724	1.00
10	ATOM 18.85	1972	C	VAL	434	30.650	53.137	68.721	1.00
	ATOM 21.33	1973	O	VAL	434	31.668	53.256	68.078	1.00
	ATOM 18.23	1974	N	THR	435	30.626	53.364	70.026	1.00
15	ATOM 18.93	1976	CA	THR	435	31.824	53.837	70.716	1.00
	ATOM 16.49	1977	CB	THR	435	31.495	54.993	71.674	1.00
	ATOM 16.60	1978	OG1	THR	435	30.641	54.492	72.693	1.00
20	ATOM 12.43	1980	CG2	THR	435	30.795	56.146	70.909	1.00
	ATOM 21.45	1981	C	THR	435	32.485	52.714	71.546	1.00
	ATOM 20.04	1982	O	THR	435	33.347	52.983	72.400	1.00
25	ATOM 20.62	1983	N	HIS	436	32.077	51.460	71.293	1.00
	ATOM 19.62	1985	CA	HIS	436	32.610	50.333	72.044	1.00
	ATOM 23.29	1986	CB	HIS	436	34.038	50.024	71.638	1.00
30	ATOM 25.16	1987	CG	HIS	436	34.155	49.533	70.236	1.00
	ATOM 26.06	1988	CD2	HIS	436	34.147	50.195	69.060	1.00
	ATOM 26.86	1989	ND1	HIS	436	34.209	48.184	69.919	1.00
35	ATOM 24.56	1991	CE1	HIS	436	34.212	48.047	68.596	1.00
	ATOM 26.47	1992	NE2	HIS	436	34.174	49.251	68.056	1.00
	ATOM 18.57	1994	C	HIS	436	32.515	50.473	73.540	1.00
40	ATOM 19.06	1995	O	HIS	436	33.474	50.250	74.248	1.00
	ATOM 19.54	1996	N	GLY	437	31.342	50.884	74.001	1.00
	ATOM 18.07	1998	CA	GLY	437	31.109	50.994	75.427	1.00
45	ATOM 19.71	1999	C	GLY	437	31.368	52.280	76.155	1.00
	ATOM 23.18	2000	O	GLY	437	31.265	52.264	77.382	1.00
	ATOM 17.74	2001	N	ARG	438	31.625	53.379	75.451	0.58
55	ATOM 16.96	2003	CA	ARG	438	31.863	54.659	76.118	0.58

	ATOM 18.69	2004	CB	ARG	438	32.322	55.699	75.072	0.58
	ATOM 24.05	2005	CG	ARG	438	32.916	56.962	75.643	0.58
5	ATOM 24.65	2006	CD	ARG	438	33.318	57.941	74.525	0.58
	ATOM 30.19	2007	NE	ARG	438	34.286	58.933	74.994	0.58
10	ATOM 31.90	2009	CZ	ARG	438	34.556	60.070	74.353	0.58
	ATOM 34.48	2010	NH1	ARG	438	33.936	60.369	73.228	0.58
	ATOM 34.48	2013	NH2	ARG	438	35.437	60.923	74.844	0.58
15	ATOM 15.26	2016	C	ARG	438	30.591	55.152	76.810	0.58
	ATOM 13.56	2017	O	ARG	438	29.497	54.837	76.393	0.58
20	ATOM 16.65	2018	N	ILE	439	30.735	55.878	77.901	1.00
	ATOM 17.06	2020	CA	ILE	439	29.608	56.467	78.618	1.00
	ATOM 20.85	2021	CB	ILE	439	30.086	57.074	79.945	1.00
25	ATOM 21.06	2022	CG2	ILE	439	28.983	57.937	80.589	1.00
	ATOM 21.92	2023	CG1	ILE	439	30.501	55.933	80.883	1.00
30	ATOM 22.55	2024	CD1	ILE	439	31.070	56.392	82.180	1.00
	ATOM 15.41	2025	C	ILE	439	29.001	57.572	77.748	1.00
	ATOM 16.20	2026	O	ILE	439	29.752	58.391	77.165	1.00
35	ATOM 10.45	2027	N	PRO	440	27.665	57.580	77.594	0.43
	ATOM 5.92	2028	CD	PRO	440	26.703	56.670	78.229	0.43
40	ATOM 9.30	2029	CA	PRO	440	26.983	58.587	76.776	0.43
	ATOM 7.88	2030	CB	PRO	440	25.516	58.151	76.850	0.43
	ATOM 7.57	2031	CG	PRO	440	25.433	57.460	78.165	0.43
45	ATOM 8.71	2032	C	PRO	440	27.190	60.024	77.272	0.43
	ATOM 6.28	2033	O	PRO	440	27.501	60.252	78.432	0.43
50	ATOM 11.99	2034	N	TYR	441	27.103	60.972	76.359	1.00
	ATOM 16.68	2036	CA	TYR	441	27.259	62.401	76.693	1.00
	ATOM 14.19	2037	CB	TYR	441	26.179	62.876	77.658	1.00
55	ATOM 16.13	2038	CG	TYR	441	24.789	62.722	77.105	1.00
	ATOM 13.76	2039	CD1	TYR	441	24.265	63.645	76.185	1.00

	ATOM	2040	CE1	TYR	441	22.966	63.522	75.713	1.00
	14.57								
	ATOM	2041	CD2	TYR	441	23.973	61.666	77.526	1.00
	15.68								
5	ATOM	2042	CE2	TYR	441	22.671	61.524	77.057	1.00
	14.69								
	ATOM	2043	CZ	TYR	441	22.168	62.465	76.146	1.00
	16.03								
10	ATOM	2044	OH	TYR	441	20.870	62.338	75.699	1.00
	16.22								
	ATOM	2046	C	TYR	441	28.635	62.642	77.299	1.00
	19.83								
	ATOM	2047	O	TYR	441	28.761	63.055	78.433	1.00
	22.48								
15	ATOM	2048	N	PRO	442	29.683	62.308	76.550	1.00
	21.96								
	ATOM	2049	CD	PRO	442	29.621	61.815	75.149	1.00
	23.72								
	ATOM	2050	CA	PRO	442	31.058	62.478	76.991	1.00
20	24.18								
	ATOM	2051	CB	PRO	442	31.849	62.276	75.687	1.00
	23.93								
	ATOM	2052	CG	PRO	442	30.987	61.262	74.932	1.00
	23.15								
25	ATOM	2053	C	PRO	442	31.353	63.888	77.593	1.00
	23.56								
	ATOM	2054	O	PRO	442	30.954	64.906	77.047	1.00
	22.74								
	ATOM	2055	N	GLY	443	31.984	63.889	78.751	1.00
30	23.98								
	ATOM	2057	CA	GLY	443	32.365	65.116	79.423	1.00
	25.02								
	ATOM	2058	C	GLY	443	31.223	65.938	80.001	1.00
	25.31								
35	ATOM	2059	O	GLY	443	31.427	67.108	80.330	1.00
	27.52								
	ATOM	2060	N	MET	444	30.040	65.347	80.141	1.00
	22.78								
	ATOM	2062	CA	MET	444	28.904	66.081	80.676	1.00
40	19.38								
	ATOM	2063	CB	MET	444	27.804	66.213	79.642	1.00
	17.92								
	ATOM	2064	CG	MET	444	28.205	66.965	78.383	1.00
	15.75								
45	ATOM	2065	SD	MET	444	27.016	66.876	77.050	1.00
	20.93								
	ATOM	2066	CE	MET	444	25.610	67.571	77.794	1.00
	15.12								
	ATOM	2067	C	MET	444	28.330	65.475	81.935	1.00
50	20.07								
	ATOM	2068	O	MET	444	28.210	64.248	82.042	1.00
	22.27								
	ATOM	2069	N	THR	445	27.978	66.348	82.880	1.00
	19.84								
55	ATOM	2071	CA	THR	445	27.372	65.932	84.106	1.00
	19.22								
	ATOM	2072	CB	THR	445	27.576	66.964	85.238	1.00
	23.06								

5	ATOM 23.49	2073	OG1	THR	445	26.830	68.164	84.934	1.00
	ATOM 24.46	2075	CG2	THR	445	29.102	67.271	85.392	1.00
	ATOM 18.15	2076	C	THR	445	25.881	65.741	83.788	1.00
	ATOM 17.17	2077	O	THR	445	25.388	66.088	82.718	1.00
	ATOM 18.92	2078	N	ASN	446	25.163	65.120	84.684	1.00
10	ATOM 22.14	2080	CA	ASN	446	23.757	64.962	84.384	1.00
	ATOM 22.94	2081	CB	ASN	446	23.118	64.029	85.368	1.00
	ATOM 23.33	2082	CG	ASN	446	23.520	62.605	85.162	1.00
15	ATOM 27.45	2083	OD1	ASN	446	23.620	62.087	84.063	1.00
	ATOM 20.08	2084	ND2	ASN	446	23.650	61.925	86.254	1.00
	ATOM 21.36	2087	C	ASN	446	22.998	66.279	84.316	1.00
20	ATOM 22.94	2088	O	ASN	446	22.103	66.415	83.504	1.00
	ATOM 21.41	2089	N	PRO	447	23.291	67.216	85.237	1.00
	ATOM 19.28	2090	CD	PRO	447	24.006	67.063	86.516	1.00
25	ATOM 19.53	2091	CA	PRO	447	22.599	68.504	85.173	1.00
	ATOM 20.05	2092	CB	PRO	447	23.242	69.293	86.331	1.00
	ATOM 20.54	2093	CG	PRO	447	23.430	68.199	87.372	1.00
30	ATOM 18.40	2094	C	PRO	447	22.884	69.115	83.783	1.00
	ATOM 18.87	2095	O	PRO	447	21.982	69.684	83.162	1.00
	ATOM 17.60	2096	N	GLU	448	24.079	68.932	83.241	1.00
35	ATOM 17.50	2098	CA	GLU	448	24.383	69.494	81.888	1.00
	ATOM 17.69	2099	CB	GLU	448	25.875	69.386	81.562	1.00
	ATOM 20.35	2100	CG	GLU	448	26.730	70.197	82.503	1.00
40	ATOM 22.71	2101	CD	GLU	448	28.202	70.065	82.200	1.00
	ATOM 21.71	2102	OE1	GLU	448	28.742	68.945	82.274	1.00
	ATOM 29.91	2103	OE2	GLU	448	28.838	71.083	81.865	1.00
45	ATOM 18.43	2104	C	GLU	448	23.601	68.769	80.802	1.00
	ATOM 17.96	2105	O	GLU	448	23.234	69.358	79.781	1.00
	ATOM 19.16	2106	N	VAL	449	23.444	67.446	80.976	1.00

	ATOM	2108	CA	VAL	449	22.649	66.685	80.003	1.00
	19.42								
	ATOM	2109	CB	VAL	449	22.680	65.134	80.205	1.00
	18.44								
5	ATOM	2110	CG1	VAL	449	21.890	64.507	79.102	1.00
	18.24								
	ATOM	2111	CG2	VAL	449	24.106	64.594	80.094	1.00
	16.28								
10	ATOM	2112	C	VAL	449	21.188	67.190	80.005	1.00
	16.19								
	ATOM	2113	O	VAL	449	20.644	67.474	78.956	1.00
	18.65								
	ATOM	2114	N	ILE	450	20.608	67.337	81.179	0.60
	14.24								
15	ATOM	2116	CA	ILE	450	19.246	67.835	81.301	0.60
	15.95								
	ATOM	2117	CB	ILE	450	18.850	67.860	82.769	0.60
	14.74								
	ATOM	2118	CG2	ILE	450	17.535	68.649	82.967	0.60
	11.72								
20	ATOM	2119	CG1	ILE	450	18.714	66.416	83.280	0.60
	13.82								
	ATOM	2120	CD1	ILE	450	18.473	66.323	84.762	0.60
	16.21								
25	ATOM	2121	C	ILE	450	19.102	69.240	80.680	0.60
	17.69								
	ATOM	2122	O	ILE	450	18.164	69.498	79.944	0.60
	16.19								
30	ATOM	2123	N	GLN	451	20.052	70.123	80.972	1.00
	22.22								
	ATOM	2125	CA	GLN	451	20.038	71.469	80.438	1.00
	23.33								
	ATOM	2126	CB	GLN	451	21.165	72.291	81.113	1.00
	29.28								
35	ATOM	2127	CG	GLN	451	21.698	73.572	80.452	1.00
	38.30								
	ATOM	2128	CD	GLN	451	23.250	73.598	80.516	1.00
	44.81								
40	ATOM	2129	OE1	GLN	451	23.870	73.579	81.599	1.00
	47.60								
	ATOM	2130	NE2	GLN	451	23.871	73.533	79.341	1.00
	47.62								
	ATOM	2133	C	GLN	451	20.112	71.447	78.914	1.00
	22.37								
45	ATOM	2134	O	GLN	451	19.300	72.094	78.265	1.00
	21.86								
	ATOM	2135	N	ASN	452	20.998	70.644	78.346	1.00
	21.50								
50	ATOM	2137	CA	ASN	452	21.105	70.604	76.893	1.00
	23.60								
	ATOM	2138	CB	ASN	452	22.291	69.730	76.475	1.00
	30.33								
	ATOM	2139	CG	ASN	452	23.620	70.476	76.472	1.00
	33.45								
55	ATOM	2140	OD1	ASN	452	24.582	70.027	75.827	1.00
	38.19								
	ATOM	2141	ND2	ASN	452	23.688	71.601	77.179	1.00
	33.08								



	ATOM	2144	C	ASN	452	19.840	70.063	76.224	1.00
	24.20								
	ATOM	2145	O	ASN	452	19.408	70.546	75.168	1.00
	25.63								
5	ATOM	2146	N	LEU	453	19.298	68.988	76.787	1.00
	22.63								
	ATOM	2148	CA	LEU	453	18.111	68.402	76.191	1.00
	20.88								
10	ATOM	2149	CB	LEU	453	17.735	67.131	76.911	1.00
	19.15								
	ATOM	2150	CG	LEU	453	18.640	66.041	76.303	1.00
	20.09								
	ATOM	2151	CD1	LEU	453	18.704	65.061	77.381	1.00
	19.24								
15	ATOM	2152	CD2	LEU	453	18.171	65.442	74.999	1.00
	19.91								
	ATOM	2153	C	LEU	453	16.953	69.359	76.154	1.00
	20.98								
20	ATOM	2154	O	LEU	453	16.247	69.482	75.150	1.00
	20.40								
	ATOM	2155	N	GLU	454	16.849	70.134	77.215	1.00
	20.29								
	ATOM	2157	CA	GLU	454	15.777	71.091	77.333	1.00
	20.69								
25	ATOM	2158	CB	GLU	454	15.636	71.460	78.808	1.00
	22.44								
	ATOM	2159	CG	GLU	454	14.691	70.571	79.652	1.00
	26.95								
30	ATOM	2160	CD	GLU	454	14.860	70.937	81.103	1.00
	32.80								
	ATOM	2161	OE1	GLU	454	15.655	71.869	81.371	1.00
	35.24								
	ATOM	2162	OE2	GLU	454	14.234	70.303	81.985	1.00
	36.29								
35	ATOM	2163	C	GLU	454	15.940	72.301	76.361	1.00
	19.99								
	ATOM	2164	O	GLU	454	14.950	72.951	76.027	1.00
	19.52								
40	ATOM	2165	N	ARG	455	17.141	72.486	75.781	1.00
	17.70								
	ATOM	2167	CA	ARG	455	17.386	73.552	74.782	1.00
	17.77								
	ATOM	2168	CB	ARG	455	18.844	74.021	74.771	1.00
	18.95								
45	ATOM	2169	CG	ARG	455	19.356	74.547	76.074	1.00
	22.96								
	ATOM	2170	CD	ARG	455	20.763	75.090	75.932	1.00
	23.08								
	ATOM	2171	NE	ARG	455	20.833	76.222	75.012	1.00
50	25.12								
	ATOM	2173	CZ	ARG	455	21.969	76.855	74.680	1.00
	24.77								
	ATOM	2174	NH1	ARG	455	23.139	76.455	75.192	1.00
	22.66								
55	ATOM	2177	NH2	ARG	455	21.926	77.913	73.881	1.00
	19.61								
	ATOM	2180	C	ARG	455	17.114	73.011	73.385	1.00
	18.74								

5	ATOM 18.28	2181	O	ARG	455	17.200	73.728	72.402	1.00
	ATOM 20.31	2182	N	GLY	456	16.807	71.716	73.285	1.00
	ATOM 18.59	2184	CA	GLY	456	16.597	71.101	71.977	1.00
	ATOM 18.02	2185	C	GLY	456	17.849	70.367	71.487	1.00
10	ATOM 17.58	2186	O	GLY	456	17.828	69.804	70.405	1.00
	ATOM 18.14	2187	N	TYR	457	18.945	70.432	72.210	1.00
	ATOM 19.56	2189	CA	TYR	457	20.149	69.747	71.750	1.00
	ATOM 17.10	2190	CB	TYR	457	21.385	70.191	72.541	1.00
15	ATOM 17.96	2191	CG	TYR	457	21.894	71.591	72.302	1.00
	ATOM 19.20	2192	CD1	TYR	457	21.478	72.352	71.226	1.00
	ATOM 19.38	2193	CE1	TYR	457	21.992	73.637	71.008	1.00
	ATOM 20.40	2194	CD2	TYR	457	22.836	72.138	73.170	1.00
20	ATOM 19.97	2195	CE2	TYR	457	23.347	73.404	72.960	1.00
	ATOM 17.83	2196	CZ	TYR	457	22.920	74.135	71.879	1.00
	ATOM 17.07	2197	OH	TYR	457	23.472	75.385	71.675	1.00
	ATOM 20.03	2199	C	TYR	457	20.021	68.246	72.034	1.00
25	ATOM 18.91	2200	O	TYR	457	19.221	67.828	72.870	1.00
	ATOM 20.26	2201	N	ARG	458	20.819	67.445	71.340	1.00
	ATOM 19.25	2203	CA	ARG	458	20.854	66.013	71.608	1.00
	ATOM 17.50	2204	CB	ARG	458	20.175	65.210	70.495	1.00
30	ATOM 14.01	2205	CG	ARG	458	18.652	65.394	70.441	1.00
	ATOM 13.72	2206	CD	ARG	458	17.986	65.025	71.777	1.00
	ATOM 15.54	2207	NE	ARG	458	16.528	65.083	71.689	1.00
	ATOM 17.63	2209	CZ	ARG	458	15.776	66.071	72.199	1.00
35	ATOM 18.53	2210	NH1	ARG	458	16.347	67.098	72.825	1.00
	ATOM 14.13	2213	NH2	ARG	458	14.444	66.012	72.092	1.00
	ATOM 19.83	2216	C	ARG	458	22.325	65.657	71.718	1.00
	ATOM 17.44	2217	O	ARG	458	23.195	66.530	71.557	1.00
40	ATOM 17.91	2218	N	MET	459	22.628	64.380	71.961	1.00

	ATOM 15.97	2220	CA	MET	459	24.043	64.001	72.101	1.00
	ATOM 15.95	2221	CB	MET	459	24.199	62.503	72.377	1.00
5	ATOM 15.08	2222	CG	MET	459	25.568	62.127	72.906	1.00
	ATOM 19.19	2223	SD	MET	459	25.816	60.318	73.149	1.00
10	ATOM 17.66	2224	CE	MET	459	24.291	59.886	73.995	1.00
	ATOM 15.70	2225	C	MET	459	24.854	64.341	70.872	1.00
	ATOM 14.70	2226	O	MET	459	24.419	64.145	69.726	1.00
15	ATOM 15.83	2227	N	VAL	460	26.046	64.885	71.098	1.00
	ATOM 14.18	2229	CA	VAL	460	26.935	65.234	70.021	1.00
20	ATOM 17.78	2230	CB	VAL	460	28.245	65.833	70.624	1.00
	ATOM 19.44	2231	CG1	VAL	460	29.355	65.930	69.544	1.00
	ATOM 15.84	2232	CG2	VAL	460	27.956	67.209	71.227	1.00
25	ATOM 15.35	2233	C	VAL	460	27.295	63.950	69.235	1.00
	ATOM 17.60	2234	O	VAL	460	27.398	62.886	69.833	1.00
30	ATOM 14.74	2235	N	ARG	461	27.463	64.046	67.924	1.00
	ATOM 20.91	2237	CA	ARG	461	27.858	62.899	67.114	1.00
	ATOM 17.94	2238	CB	ARG	461	28.214	63.364	65.695	1.00
35	ATOM 17.02	2239	CG	ARG	461	27.058	63.957	64.917	1.00
	ATOM 14.96	2240	CD	ARG	461	27.500	64.354	63.533	1.00
40	ATOM 17.42	2241	NE	ARG	461	26.364	64.666	62.692	1.00
	ATOM 18.25	2243	CZ	ARG	461	25.687	65.829	62.692	1.00
	ATOM 18.39	2244	NH1	ARG	461	26.033	66.825	63.493	1.00
45	ATOM 17.39	2247	NH2	ARG	461	24.645	65.985	61.881	1.00
	ATOM 24.64	2250	C	ARG	461	29.093	62.172	67.672	1.00
50	ATOM 26.86	2251	O	ARG	461	30.143	62.800	67.840	1.00
	ATOM 25.97	2252	N	PRO	462	28.974	60.863	68.043	1.00
	ATOM 26.62	2253	CD	PRO	462	27.723	60.100	68.164	1.00
55	ATOM 26.30	2254	CA	PRO	462	30.105	60.075	68.580	1.00
	ATOM 25.21	2255	CB	PRO	462	29.478	58.706	68.855	1.00

	ATOM	2256	CG	PRO	462	28.091	59.044	69.225	1.00
	27.71								
	ATOM	2257	C	PRO	462	31.186	59.973	67.531	1.00
	27.36								
5	ATOM	2258	O	PRO	462	30.887	60.074	66.349	1.00
	22.85								
	ATOM	2259	N	ASP	463	32.440	59.856	67.976	1.00
	33.07								
10	ATOM	2261	CA	ASP	463	33.542	59.724	67.037	1.00
	36.40								
	ATOM	2262	CB	ASP	463	34.905	59.513	67.731	1.00
	42.61								
	ATOM	2263	CG	ASP	463	35.486	60.802	68.343	1.00
	46.87								
15	ATOM	2264	OD1	ASP	463	35.313	61.884	67.723	1.00
	52.92								
	ATOM	2265	OD2	ASP	463	36.113	60.733	69.440	1.00
	48.62								
20	ATOM	2266	C	ASP	463	33.249	58.565	66.102	1.00
	36.01								
	ATOM	2267	O	ASP	463	32.726	57.512	66.506	1.00
	38.21								
	ATOM	2268	N	ASN	464	33.364	58.858	64.826	1.00
	34.27								
25	ATOM	2270	CA	ASN	464	33.164	57.823	63.884	1.00
	33.69								
	ATOM	2271	CB	ASN	464	34.310	56.892	64.024	1.00
	37.65								
30	ATOM	2272	CG	ASN	464	35.421	57.411	63.277	1.00
	41.02								
	ATOM	2273	OD1	ASN	464	36.530	57.497	63.748	1.00
	42.34								
	ATOM	2274	ND2	ASN	464	35.092	57.962	62.114	1.00
	46.22								
35	ATOM	2277	C	ASN	464	31.858	57.103	63.742	1.00
	31.02								
	ATOM	2278	O	ASN	464	31.769	55.942	63.346	1.00
	33.21								
40	ATOM	2279	N	CYS	465	30.831	57.839	64.091	1.00
	28.20								
	ATOM	2281	CA	CYS	465	29.512	57.312	63.948	1.00
	23.77								
	ATOM	2282	CB	CYS	465	28.624	57.996	64.957	1.00
	22.59								
45	ATOM	2283	SG	CYS	465	26.940	57.347	64.922	1.00
	20.23								
	ATOM	2284	C	CYS	465	29.009	57.609	62.534	1.00
	20.29								
50	ATOM	2285	O	CYS	465	29.113	58.722	62.076	1.00
	20.20								
	ATOM	2286	N	PRO	466	28.580	56.571	61.785	1.00
	19.54								
	ATOM	2287	CD	PRO	466	28.614	55.148	62.170	1.00
	18.45								
55	ATOM	2288	CA	PRO	466	28.044	56.745	60.424	1.00
	17.34								
	ATOM	2289	CB	PRO	466	27.528	55.340	60.086	1.00
	17.76								

5	ATOM 18.34	2290	CG	PRO	466	28.454	54.452	60.853	1.00
	ATOM 17.27	2291	C	PRO	466	26.833	57.713	60.603	1.00
	ATOM 15.23	2292	O	PRO	466	26.087	57.593	61.573	1.00
	ATOM 18.48	2293	N	GLU	467	26.693	58.678	59.702	1.00
10	ATOM 18.82	2295	CA	GLU	467	25.622	59.652	59.830	1.00
	ATOM 17.73	2296	CB	GLU	467	25.850	60.793	58.830	1.00
	ATOM 17.92	2297	CG	GLU	467	25.269	62.174	59.193	1.00
15	ATOM 16.81	2298	CD	GLU	467	25.281	62.575	60.623	1.00
	ATOM 20.48	2299	OE1	GLU	467	26.239	62.494	61.391	1.00
	ATOM 19.26	2300	OE2	GLU	467	24.245	63.097	60.907	1.00
20	ATOM 16.25	2301	C	GLU	467	24.233	59.009	59.717	1.00
	ATOM 18.45	2302	O	GLU	467	23.296	59.473	60.377	1.00
	ATOM 12.70	2303	N	GLU	468	24.109	57.933	58.948	0.51
25	ATOM 9.87	2305	CA	GLU	468	22.824	57.230	58.840	0.51
	ATOM 9.75	2306	CB	GLU	468	22.881	56.084	57.826	0.51
	ATOM 12.87	2307	CG	GLU	468	22.768	56.476	56.373	0.51
30	ATOM 16.73	2308	CD	GLU	468	23.600	55.604	55.454	0.51
	ATOM 21.01	2309	OE1	GLU	468	24.697	55.613	55.289	0.51
	ATOM 19.71	2310	OE2	GLU	468	23.104	54.806	54.715	0.51
40	ATOM 7.61	2311	C	GLU	468	22.427	56.693	60.208	0.51
	ATOM 5.14	2312	O	GLU	468	21.285	56.793	60.593	0.51
	ATOM 11.98	2313	N	LEU	469	23.383	56.173	60.961	1.00
45	ATOM 13.45	2315	CA	LEU	469	23.088	55.669	62.295	1.00
	ATOM 16.09	2316	CB	LEU	469	24.255	54.815	62.821	1.00
	ATOM 18.21	2317	CG	LEU	469	24.011	54.128	64.188	1.00
50	ATOM 19.45	2318	CD1	LEU	469	22.896	53.133	64.027	1.00
	ATOM 20.80	2319	CD2	LEU	469	25.309	53.401	64.621	1.00
	ATOM 14.50	2320	C	LEU	469	22.810	56.829	63.234	1.00
55	ATOM 13.69	2321	O	LEU	469	21.922	56.748	64.097	1.00

	ATOM	2322	N	TYR	470	23.556	57.925	63.087	1.00
	15.76								
	ATOM	2324	CA	TYR	470	23.330	59.070	63.961	1.00
	15.69								
5	ATOM	2325	CB	TYR	470	24.347	60.190	63.676	1.00
	15.77								
	ATOM	2326	CG	TYR	470	24.177	61.346	64.628	1.00
	13.26								
10	ATOM	2327	CD1	TYR	470	24.383	61.192	65.989	1.00
	11.67								
	ATOM	2328	CE1	TYR	470	24.238	62.237	66.860	1.00
	14.86								
	ATOM	2329	CD2	TYR	470	23.799	62.610	64.152	1.00
	14.80								
15	ATOM	2330	CE2	TYR	470	23.648	63.674	65.007	1.00
	11.49								
	ATOM	2331	CZ	TYR	470	23.876	63.487	66.360	1.00
	14.26								
20	ATOM	2332	OH	TYR	470	23.829	64.533	67.259	1.00
	13.59								
	ATOM	2334	C	TYR	470	21.897	59.622	63.790	1.00
	15.89								
	ATOM	2335	O	TYR	470	21.222	59.948	64.748	1.00
	16.07								
25	ATOM	2336	N	GLN	471	21.458	59.722	62.563	1.00
	17.58								
	ATOM	2338	CA	GLN	471	20.122	60.197	62.267	1.00
	19.32								
30	ATOM	2339	CB	GLN	471	20.095	60.406	60.776	1.00
	20.31								
	ATOM	2340	CG	GLN	471	20.193	61.875	60.292	1.00
	27.33								
	ATOM	2341	CD	GLN	471	20.883	62.897	61.206	1.00
	28.92								
35	ATOM	2342	OE1	GLN	471	22.072	62.990	61.296	1.00
	36.59								
	ATOM	2343	NE2	GLN	471	20.103	63.750	61.758	1.00
	28.48								
40	ATOM	2346	C	GLN	471	19.025	59.212	62.785	1.00
	21.02								
	ATOM	2347	O	GLN	471	17.942	59.640	63.223	1.00
	22.52								
	ATOM	2348	N	LEU	472	19.337	57.916	62.835	1.00
	19.39								
45	ATOM	2350	CA	LEU	472	18.398	56.945	63.388	1.00
	19.13								
	ATOM	2351	CB	LEU	472	18.851	55.510	63.099	1.00
	22.09								
	ATOM	2352	CG	LEU	472	17.826	54.393	63.372	1.00
50	21.25								
	ATOM	2353	CD1	LEU	472	16.645	54.578	62.419	1.00
	21.50								
	ATOM	2354	CD2	LEU	472	18.486	53.021	63.134	1.00
	16.29								
55	ATOM	2355	C	LEU	472	18.313	57.183	64.917	1.00
	18.02								
	ATOM	2356	O	LEU	472	17.232	57.104	65.524	1.00
	19.05								

	ATOM 18.25	2357	N	MET	473	19.448	57.491	65.539	1.00
	ATOM 17.95	2359	CA	MET	473	19.449	57.813	66.976	1.00
5	ATOM 18.39	2360	CB	MET	473	20.836	58.137	67.466	1.00
	ATOM 19.12	2361	CG	MET	473	21.885	57.043	67.296	1.00
10	ATOM 17.70	2362	SD	MET	473	23.579	57.734	67.549	1.00
	ATOM 21.24	2363	CE	MET	473	24.541	56.279	67.611	1.00
	ATOM 17.42	2364	C	MET	473	18.567	59.055	67.233	1.00
15	ATOM 17.21	2365	O	MET	473	17.826	59.099	68.220	1.00
	ATOM 17.08	2366	N	ARG	474	18.648	60.043	66.342	1.00
20	ATOM 16.18	2368	CA	ARG	474	17.892	61.290	66.513	1.00
	ATOM 16.13	2369	CB	ARG	474	18.240	62.345	65.407	1.00
	ATOM 15.54	2370	CG	ARG	474	19.678	62.878	65.264	1.00
25	ATOM 17.62	2371	CD	ARG	474	20.206	63.766	66.340	1.00
	ATOM 25.22	2372	NE	ARG	474	19.690	65.108	66.507	1.00
30	ATOM 24.91	2374	CZ	ARG	474	20.451	66.074	66.989	1.00
	ATOM 21.73	2375	NH1	ARG	474	21.737	65.854	67.244	1.00
	ATOM 28.65	2378	NH2	ARG	474	19.827	67.067	67.594	1.00
35	ATOM 15.94	2381	C	ARG	474	16.374	60.982	66.462	1.00
	ATOM 18.86	2382	O	ARG	474	15.613	61.602	67.148	1.00
40	ATOM 16.10	2383	N	LEU	475	15.933	60.061	65.611	1.00
	ATOM 17.16	2385	CA	LEU	475	14.507	59.688	65.596	1.00
	ATOM 16.67	2386	CB	LEU	475	14.201	58.641	64.522	1.00
45	ATOM 18.23	2387	CG	LEU	475	14.260	58.919	63.031	1.00
	ATOM 20.24	2388	CD1	LEU	475	13.551	57.692	62.447	1.00
50	ATOM 19.21	2389	CD2	LEU	475	13.537	60.190	62.620	1.00
	ATOM 16.79	2390	C	LEU	475	14.103	59.119	66.949	1.00
	ATOM 17.89	2391	O	LEU	475	13.025	59.451	67.477	1.00
55	ATOM 16.31	2392	N	CYS	476	15.007	58.382	67.581	1.00
	ATOM 16.85	2394	CA	CYS	476	14.718	57.793	68.896	1.00

5	ATOM 15.55	2395	CB	CYS	476	15.831	56.780	69.277	1.00
	ATOM 14.96	2396	SG	CYS	476	15.969	55.406	68.118	1.00
	ATOM 17.41	2397	C	CYS	476	14.650	58.840	69.980	1.00
	ATOM 20.02	2398	O	CYS	476	14.159	58.563	71.058	1.00
10	ATOM 20.22	2399	N	TRP	477	15.236	60.016	69.704	1.00
	ATOM 19.77	2401	CA	TRP	477	15.284	61.111	70.682	1.00
	ATOM 19.85	2402	CB	TRP	477	16.689	61.668	70.808	1.00
	ATOM 19.63	2403	CG	TRP	477	17.712	60.646	71.178	1.00
15	ATOM 18.71	2404	CD2	TRP	477	19.084	60.628	70.782	1.00
	ATOM 20.22	2405	CE2	TRP	477	19.682	59.507	71.392	1.00
	ATOM 18.45	2406	CE3	TRP	477	19.869	61.469	69.963	1.00
	ATOM 20.69	2407	CD1	TRP	477	17.537	59.565	71.995	1.00
20	ATOM 17.19	2408	NE1	TRP	477	18.721	58.877	72.136	1.00
	ATOM 16.34	2410	CZ2	TRP	477	21.060	59.190	71.216	1.00
	ATOM 15.37	2411	CZ3	TRP	477	21.222	61.159	69.786	1.00
	ATOM 15.60	2412	CH2	TRP	477	21.796	60.035	70.416	1.00
25	ATOM 19.98	2413	C	TRP	477	14.305	62.251	70.376	1.00
	ATOM 17.04	2414	O	TRP	477	14.498	63.369	70.825	1.00
	ATOM 18.53	2415	N	LYS	478	13.280	61.974	69.572	1.00
	ATOM 17.79	2417	CA	LYS	478	12.302	63.005	69.296	1.00
30	ATOM 18.06	2418	CB	LYS	478	11.276	62.549	68.282	1.00
	ATOM 17.26	2419	CG	LYS	478	11.831	62.577	66.881	1.00
	ATOM 19.20	2420	CD	LYS	478	10.816	62.102	65.915	1.00
	ATOM 22.29	2421	CE	LYS	478	11.309	62.303	64.503	1.00
35	ATOM 27.75	2422	NZ	LYS	478	11.573	63.737	64.240	1.00
	ATOM 18.94	2426	C	LYS	478	11.615	63.452	70.576	1.00
	ATOM 19.46	2427	O	LYS	478	11.429	62.677	71.516	1.00
	ATOM 19.78	2428	N	GLU	479	11.319	64.743	70.658	1.00
40	ATOM 22.45	2430	CA	GLU	479	10.695	65.284	71.852	1.00



5	ATOM 27.45	2431	CB	GLU	479	10.434	66.767	71.627	1.00
	ATOM 33.27	2432	CG	GLU	479	9.843	67.518	72.816	1.00
	ATOM 38.31	2433	CD	GLU	479	10.791	67.878	73.971	1.00
	ATOM 44.43	2434	OE1	GLU	479	12.044	67.900	73.903	1.00
10	ATOM 39.74	2435	OE2	GLU	479	10.187	68.204	75.002	1.00
	ATOM 22.57	2436	C	GLU	479	9.394	64.549	72.287	1.00
	ATOM 21.17	2437	O	GLU	479	9.264	64.065	73.415	1.00
	ATOM 21.63	2438	N	ARG	480	8.427	64.469	71.387	1.00
15	ATOM 25.32	2440	CA	ARG	480	7.194	63.785	71.746	1.00
	ATOM 27.02	2441	CB	ARG	480	6.053	64.222	70.837	1.00
	ATOM 34.66	2442	CG	ARG	480	5.329	65.427	71.242	1.00
	ATOM 35.70	2443	CD	ARG	480	4.500	65.812	70.100	1.00
20	ATOM 41.57	2444	NE	ARG	480	4.865	65.561	68.688	1.00
	ATOM 43.95	2446	CZ	ARG	480	3.848	65.369	67.862	1.00
	ATOM 46.80	2447	NH1	ARG	480	2.706	65.400	68.498	1.00
	ATOM 43.75	2450	NH2	ARG	480	3.857	65.388	66.521	1.00
25	ATOM 22.03	2453	C	ARG	480	7.361	62.274	71.585	1.00
	ATOM 21.78	2454	O	ARG	480	7.707	61.799	70.526	1.00
	ATOM 20.56	2455	N	PRO	481	7.088	61.510	72.641	1.00
	ATOM 19.52	2456	CD	PRO	481	6.601	61.978	73.953	1.00
30	ATOM 20.01	2457	CA	PRO	481	7.203	60.043	72.606	1.00
	ATOM 19.09	2458	CB	PRO	481	6.566	59.619	73.916	1.00
	ATOM 18.91	2459	CG	PRO	481	6.859	60.763	74.832	1.00
	ATOM 22.36	2460	C	PRO	481	6.489	59.426	71.414	1.00
35	ATOM 24.56	2461	O	PRO	481	7.057	58.599	70.701	1.00
	ATOM 23.76	2462	N	GLU	482	5.289	59.920	71.100	1.00
	ATOM 22.80	2464	CA	GLU	482	4.527	59.365	69.977	1.00
	ATOM 26.56	2465	CB	GLU	482	3.101	59.928	69.970	1.00
40	ATOM 34.44	2466	CG	GLU	482	3.088	61.434	69.770	1.00

5	ATOM 37.15	2467	CD	GLU	482	2.854	62.240	71.068	1.00
	ATOM 32.95	2468	OE1	GLU	482	3.373	61.884	72.176	1.00
	ATOM 44.38	2469	OE2	GLU	482	2.104	63.231	70.949	1.00
	ATOM 20.97	2470	C	GLU	482	5.182	59.557	68.626	1.00
	ATOM 20.58	2471	O	GLU	482	4.835	58.870	67.667	1.00
10	ATOM 20.69	2472	N	ASP	483	6.108	60.502	68.520	1.00
	ATOM 17.73	2474	CA	ASP	483	6.810	60.707	67.247	1.00
	ATOM 21.92	2475	CB	ASP	483	7.313	62.132	67.113	1.00
15	ATOM 23.99	2476	CG	ASP	483	6.201	63.123	66.952	1.00
	ATOM 26.48	2477	OD1	ASP	483	5.090	62.749	66.535	1.00
	ATOM 26.05	2478	OD2	ASP	483	6.476	64.279	67.256	1.00
20	ATOM 16.37	2479	C	ASP	483	7.994	59.779	67.074	1.00
	ATOM 13.59	2480	O	ASP	483	8.529	59.663	65.984	1.00
	ATOM 16.89	2481	N	ARG	484	8.409	59.133	68.151	1.00
25	ATOM 17.09	2483	CA	ARG	484	9.556	58.206	68.083	1.00
	ATOM 13.85	2484	CB	ARG	484	10.054	57.871	69.488	1.00
	ATOM 11.02	2485	CG	ARG	484	10.487	59.103	70.255	1.00
30	ATOM 12.58	2486	CD	ARG	484	10.824	58.769	71.676	1.00
	ATOM 14.20	2487	NE	ARG	484	10.898	59.984	72.449	1.00
	ATOM 21.54	2489	CZ	ARG	484	10.673	60.073	73.746	1.00
35	ATOM 20.98	2490	NH1	ARG	484	10.373	58.989	74.443	1.00
	ATOM 23.02	2493	NH2	ARG	484	10.632	61.286	74.357	1.00
	ATOM 19.02	2496	C	ARG	484	9.079	56.942	67.337	1.00
40	ATOM 20.65	2497	O	ARG	484	7.918	56.565	67.419	1.00
	ATOM 17.88	2498	N	PRO	485	9.981	56.307	66.584	1.00
	ATOM 17.09	2499	CD	PRO	485	11.424	56.601	66.551	1.00
45	ATOM 16.95	2500	CA	PRO	485	9.680	55.098	65.809	1.00
	ATOM 15.97	2501	CB	PRO	485	10.935	54.941	64.982	1.00
	ATOM 14.91	2502	CG	PRO	485	12.002	55.366	65.916	1.00

	ATOM	2503	C	PRO	485	9.387	53.845	66.653	1.00
	15.71								
	ATOM	2504	O	PRO	485	9.619	53.806	67.838	1.00
	14.43								
5	ATOM	2505	N	THR	486	8.768	52.861	66.025	1.00
	16.25								
	ATOM	2507	CA	THR	486	8.504	51.581	66.722	1.00
	17.14								
10	ATOM	2508	CB	THR	486	7.417	50.779	66.033	1.00
	16.41								
	ATOM	2509	OG1	THR	486	7.829	50.507	64.693	1.00
	16.20								
	ATOM	2511	CG2	THR	486	6.058	51.558	66.000	1.00
	15.66								
15	ATOM	2512	C	THR	486	9.779	50.747	66.664	1.00
	16.65								
	ATOM	2513	O	THR	486	10.647	50.987	65.824	1.00
	17.35								
20	ATOM	2514	N	PHE	487	9.891	49.752	67.531	1.00
	16.93								
	ATOM	2516	CA	PHE	487	11.080	48.887	67.487	1.00
	15.50								
	ATOM	2517	CB	PHE	487	11.174	48.036	68.741	1.00
	12.76								
25	ATOM	2518	CG	PHE	487	11.758	48.741	69.884	1.00
	12.18								
	ATOM	2519	CD1	PHE	487	13.138	49.069	69.879	1.00
	11.67								
30	ATOM	2520	CD2	PHE	487	10.987	49.065	70.985	1.00
	12.34								
	ATOM	2521	CE1	PHE	487	13.709	49.708	70.975	1.00
	12.23								
	ATOM	2522	CE2	PHE	487	11.552	49.727	72.097	1.00
	13.42								
35	ATOM	2523	CZ	PHE	487	12.937	50.044	72.075	1.00
	12.97								
	ATOM	2524	C	PHE	487	11.076	48.043	66.241	1.00
	17.36								
40	ATOM	2525	O	PHE	487	12.130	47.704	65.711	1.00
	18.27								
	ATOM	2526	N	ASP	488	9.905	47.728	65.719	1.00
	19.57								
	ATOM	2528	CA	ASP	488	9.892	46.945	64.483	1.00
	20.13								
45	ATOM	2529	CB	ASP	488	8.470	46.499	64.106	1.00
	24.27								
	ATOM	2530	CG	ASP	488	8.496	45.499	62.992	1.00
	29.59								
50	ATOM	2531	OD1	ASP	488	9.131	44.444	63.191	1.00
	36.24								
	ATOM	2532	OD2	ASP	488	7.964	45.752	61.907	1.00
	33.69								
	ATOM	2533	C	ASP	488	10.488	47.784	63.346	1.00
	18.94								
55	ATOM	2534	O	ASP	488	11.215	47.273	62.444	1.00
	16.23								
	ATOM	2535	N	TYR	489	10.150	49.082	63.347	1.00
	17.75								

5	ATOM 17.95	2537	CA	TYR	489	10.712	49.989	62.324	1.00
	ATOM 17.00	2538	CB	TYR	489	10.131	51.399	62.490	1.00
	ATOM 15.28	2539	CG	TYR	489	10.784	52.406	61.612	1.00
	ATOM 14.83	2540	CD1	TYR	489	10.356	52.584	60.313	1.00
	ATOM 15.97	2541	CE1	TYR	489	10.989	53.458	59.479	1.00
10	ATOM 15.71	2542	CD2	TYR	489	11.877	53.158	62.063	1.00
	ATOM 14.92	2543	CE2	TYR	489	12.511	54.063	61.209	1.00
	ATOM 15.91	2544	CZ	TYR	489	12.065	54.201	59.929	1.00
15	ATOM 17.58	2545	OH	TYR	489	12.646	55.117	59.055	1.00
	ATOM 16.42	2547	C	TYR	489	12.258	50.052	62.496	1.00
	ATOM 15.86	2548	O	TYR	489	13.005	50.000	61.532	1.00
	ATOM 16.20	2549	N	LEU	490	12.702	50.223	63.726	1.00
25	ATOM 17.33	2551	CA	LEU	490	14.130	50.318	63.992	1.00
	ATOM 15.71	2552	CB	LEU	490	14.357	50.563	65.480	1.00
	ATOM 18.53	2553	CG	LEU	490	13.988	51.980	65.957	1.00
30	ATOM 13.48	2554	CD1	LEU	490	13.929	52.008	67.486	1.00
	ATOM 13.64	2555	CD2	LEU	490	15.081	52.997	65.466	1.00
	ATOM 17.72	2556	C	LEU	490	14.848	49.036	63.546	1.00
35	ATOM 17.65	2557	O	LEU	490	15.904	49.116	62.933	1.00
	ATOM 18.78	2558	N	ARG	491	14.249	47.881	63.824	1.00
	ATOM 17.34	2560	CA	ARG	491	14.840	46.616	63.419	1.00
40	ATOM 17.59	2561	CB	ARG	491	13.982	45.428	63.875	1.00
	ATOM 24.17	2562	CG	ARG	491	14.540	44.136	63.232	1.00
	ATOM 22.99	2563	CD	ARG	491	13.523	43.026	63.167	1.00
	ATOM 25.56	2564	NE	ARG	491	12.284	43.481	62.543	1.00
50	ATOM 22.13	2566	CZ	ARG	491	12.064	43.567	61.239	1.00
	ATOM 20.13	2567	NH1	ARG	491	12.999	43.225	60.371	1.00
	ATOM 22.56	2570	NH2	ARG	491	10.894	44.032	60.802	1.00
55	ATOM 15.82	2573	C	ARG	491	14.987	46.543	61.911	1.00

	ATOM	2574	O	ARG	491	16.047	46.194	61.391	1.00
	17.69								
	ATOM	2575	N	SER	492	13.929	46.895	61.201	0.71
	14.44								
5	ATOM	2577	CA	SER	492	13.948	46.832	59.751	0.71
	12.85								
	ATOM	2578	CB	SER	492	12.560	47.197	59.208	0.71
	10.21								
10	ATOM	2579	OG	SER	492	12.535	47.140	57.800	0.71
	13.48								
	ATOM	2581	C	SER	492	15.009	47.747	59.152	0.71
	12.75								
	ATOM	2582	O	SER	492	15.688	47.387	58.208	0.71
	12.67								
15	ATOM	2583	N	VAL	493	15.128	48.946	59.687	1.00
	15.45								
	ATOM	2585	CA	VAL	493	16.101	49.895	59.178	1.00
	15.94								
	ATOM	2586	CB	VAL	493	15.912	51.314	59.829	1.00
20	18.03								
	ATOM	2587	CG1	VAL	493	17.062	52.223	59.447	1.00
	15.50								
	ATOM	2588	CG2	VAL	493	14.587	51.931	59.354	1.00
	14.02								
25	ATOM	2589	C	VAL	493	17.520	49.389	59.452	1.00
	12.14								
	ATOM	2590	O	VAL	493	18.341	49.419	58.586	1.00
	11.76								
30	ATOM	2591	N	LEU	494	17.766	48.933	60.667	1.00
	13.03								
	ATOM	2593	CA	LEU	494	19.086	48.432	61.028	1.00
	14.71								
	ATOM	2594	CB	LEU	494	19.157	48.159	62.520	1.00
	10.71								
35	ATOM	2595	CG	LEU	494	19.173	49.410	63.390	1.00
	8.89								
	ATOM	2596	CD1	LEU	494	18.912	49.063	64.858	1.00
	2.00								
	ATOM	2597	CD2	LEU	494	20.551	50.101	63.290	1.00
40	12.44								
	ATOM	2598	C	LEU	494	19.502	47.218	60.180	1.00
	17.11								
	ATOM	2599	O	LEU	494	20.666	47.111	59.803	1.00
	16.73								
45	ATOM	2600	N	GLU	495	18.559	46.339	59.844	1.00
	20.35								
	ATOM	2602	CA	GLU	495	18.876	45.198	58.999	1.00
	21.31								
	ATOM	2603	CB	GLU	495	17.669	44.245	58.899	1.00
50	23.20								
	ATOM	2604	CG	GLU	495	17.373	43.530	60.206	1.00
	25.30								
	ATOM	2605	CD	GLU	495	16.180	42.595	60.127	1.00
	27.48								
55	ATOM	2606	OE1	GLU	495	15.434	42.595	59.123	1.00
	29.73								
	ATOM	2607	OE2	GLU	495	15.960	41.852	61.083	1.00
	31.46								

5	ATOM 22.77	2608	C	GLU	495	19.270	45.711	57.611	1.00
	ATOM 22.87	2609	O	GLU	495	20.174	45.168	56.954	1.00
	ATOM 22.86	2610	N	ASP	496	18.574	46.740	57.126	1.00
	ATOM 22.17	2612	CA	ASP	496	18.915	47.313	55.831	1.00
10	ATOM 23.72	2613	CB	ASP	496	17.885	48.377	55.400	1.00
	ATOM 24.62	2614	CG	ASP	496	16.620	47.773	54.828	1.00
	ATOM 27.54	2615	OD1	ASP	496	16.584	46.547	54.539	1.00
	ATOM 23.63	2616	OD2	ASP	496	15.644	48.526	54.664	1.00
15	ATOM 20.74	2617	C	ASP	496	20.303	47.935	55.898	1.00
	ATOM 20.45	2618	O	ASP	496	21.034	47.881	54.941	1.00
	ATOM 22.83	2619	N	PHE	497	20.653	48.551	57.031	1.00
	ATOM 23.54	2621	CA	PHE	497	21.990	49.160	57.185	1.00
20	ATOM 22.41	2622	CB	PHE	497	22.107	49.907	58.534	1.00
	ATOM 19.41	2623	CG	PHE	497	21.396	51.257	58.593	1.00
	ATOM 16.87	2624	CD1	PHE	497	20.699	51.789	57.504	1.00
	ATOM 17.79	2625	CD2	PHE	497	21.446	51.973	59.761	1.00
25	ATOM 15.59	2626	CE1	PHE	497	20.042	53.066	57.611	1.00
	ATOM 16.89	2627	CE2	PHE	497	20.808	53.213	59.883	1.00
	ATOM 15.28	2628	CZ	PHE	497	20.107	53.751	58.799	1.00
	ATOM 26.43	2629	C	PHE	497	23.144	48.119	57.079	1.00
30	ATOM 24.05	2630	O	PHE	497	24.132	48.361	56.405	1.00
	ATOM 31.81	2631	N	PHE	498	22.995	46.993	57.786	1.00
	ATOM 34.53	2633	CA	PHE	498	23.937	45.847	57.839	1.00
	ATOM 38.33	2634	CB	PHE	498	23.410	44.895	58.970	1.00
35	ATOM 42.97	2635	CG	PHE	498	23.812	43.440	58.870	1.00
	ATOM 44.23	2636	CD1	PHE	498	25.128	43.061	58.962	1.00
	ATOM 45.57	2637	CD2	PHE	498	22.841	42.441	58.808	1.00
	ATOM 45.32	2638	CE1	PHE	498	25.494	41.718	59.002	1.00
40	ATOM 45.40	2639	CE2	PHE	498	23.194	41.084	58.846	1.00

	ATOM	2640	CZ	PHE	498	24.536	40.728	58.947	1.00
	45.26								
	ATOM	2641	C	PHE	498	23.986	45.174	56.452	1.00
	34.71								
5	ATOM	2642	O	PHE	498	25.078	44.797	55.999	1.00
	34.04								
	ATOM	2643	N	THR	499	22.861	45.066	55.747	1.00
	36.17								
10	ATOM	2645	CA	THR	499	22.929	44.395	54.446	1.00
	39.53								
	ATOM	2646	CB	THR	499	21.599	43.788	53.879	1.00
	38.32								
	ATOM	2647	OG1	THR	499	20.731	44.827	53.457	1.00
	40.33								
15	ATOM	2649	CG2	THR	499	20.883	42.893	54.883	1.00
	38.45								
	ATOM	2650	C	THR	499	23.610	45.230	53.394	1.00
	42.57								
20	ATOM	2651	O	THR	499	24.254	44.701	52.499	1.00
	45.02								
	ATOM	2652	N	ALA	500	23.561	46.542	53.566	1.00
	46.24								
	ATOM	2654	CA	ALA	500	24.251	47.406	52.624	1.00
	48.43								
25	ATOM	2655	CB	ALA	500	23.704	48.821	52.716	1.00
	48.43								
	ATOM	2656	C	ALA	500	25.755	47.359	52.979	1.00
	48.93								
30	ATOM	2657	O	ALA	500	26.588	47.243	52.081	1.00
	51.02								
	ATOM	2658	N	THR	501	26.087	47.447	54.280	1.00
	49.00								
	ATOM	2660	CA	THR	501	27.489	47.375	54.745	1.00
	50.41								
35	ATOM	2661	CB	THR	501	27.729	47.812	56.242	1.00
	50.29								
	ATOM	2662	OG1	THR	501	27.170	46.843	57.145	1.00
	51.73								
40	ATOM	2664	CG2	THR	501	27.211	49.187	56.529	1.00
	48.41								
	ATOM	2665	C	THR	501	28.051	45.942	54.648	1.00
	51.23								
	ATOM	2666	O	THR	501	27.291	45.008	54.304	1.00
	50.34								
45	ATOM	2667	OT	THR	501	29.271	45.796	54.838	1.00
	53.71								
	ATOM	2668	S	SO4	901	20.240	32.671	68.950	1.00
	20.54								
	ATOM	2669	O1	SO4	901	20.164	32.039	70.208	1.00
50	18.75								
	ATOM	2670	O2	SO4	901	18.884	33.001	68.524	1.00
	21.22								
	ATOM	2671	O3	SO4	901	21.012	33.903	69.104	1.00
	22.65								
55	ATOM	2672	O4	SO4	901	20.810	31.783	68.019	1.00
	20.07								
	ATOM	2673	PA	ANP	1	25.168	41.602	88.040	1.00
	59.70								

	ATOM	2674	O1A ANP	1	25.690	41.585	89.452	1.00
	62.05							
	ATOM	2675	O2A ANP	1	23.870	40.964	87.774	1.00
	60.10							
5	ATOM	2676	O5' ANP	1	26.271	40.936	87.075	1.00
	55.58							
	ATOM	2677	O3A ANP	1	25.238	43.072	87.395	1.00
	58.85							
10	ATOM	2678	C5' ANP	1	27.126	39.813	87.313	1.00
	47.85							
	ATOM	2679	C4' ANP	1	27.811	39.435	85.961	1.00
	42.19							
	ATOM	2680	O4' ANP	1	27.328	38.181	85.485	1.00
	39.82							
15	ATOM	2681	C1' ANP	1	27.393	38.245	84.067	1.00
	34.30							
	ATOM	2682	N9 ANP	1	26.168	37.720	83.671	1.00
	29.49							
20	ATOM	2683	C4 ANP	1	25.987	36.620	82.839	1.00
	27.56							
	ATOM	2684	N3 ANP	1	26.971	35.962	82.079	1.00
	25.59							
	ATOM	2685	C2 ANP	1	26.430	34.902	81.461	1.00
	25.56							
25	ATOM	2686	N1 ANP	1	25.142	34.566	81.317	1.00
	22.28							
	ATOM	2687	C6 ANP	1	24.205	35.236	82.032	1.00
	24.41							
30	ATOM	2688	N6 ANP	1	22.887	34.873	81.858	1.00
	23.00							
	ATOM	2689	C5 ANP	1	24.642	36.296	82.892	1.00
	27.32							
	ATOM	2690	N7 ANP	1	23.958	37.069	83.756	1.00
	27.18							
35	ATOM	2691	C8 ANP	1	24.888	37.892	84.271	1.00
	29.52							
	ATOM	2692	C2' ANP	1	27.365	39.606	83.480	1.00
	37.32							
40	ATOM	2693	O2' ANP	1	27.402	39.564	81.930	1.00
	37.60							
	ATOM	2694	C3' ANP	1	28.466	39.860	84.536	1.00
	41.10							
	ATOM	2695	O3' ANP	1	29.648	40.806	84.396	1.00
	40.76							
45	ATOM	2696	OH2 TIP	1	21.636	29.682	74.788	1.00
	24.70							
	ATOM	2699	OH2 TIP	2	19.421	27.894	78.845	1.00
	15.80							
50	ATOM	2702	OH2 TIP	3	14.819	51.729	79.254	1.00
	11.50							
	ATOM	2705	OH2 TIP	4	19.432	60.733	77.592	1.00
	22.33							
	ATOM	2708	OH2 TIP	5	20.635	62.747	73.259	1.00
	21.30							
55	ATOM	2711	OH2 TIP	6	16.552	32.841	74.619	1.00
	25.56							
	ATOM	2714	OH2 TIP	7	24.548	68.842	70.700	1.00
	20.10							



	ATOM	2717	OH2 TIP	8	3.895	16.823	94.898	1.00
	13.20							
	ATOM	2720	OH2 TIP	9	18.109	61.908	79.708	1.00
	27.65							
5	ATOM	2723	OH2 TIP	10	16.726	62.080	62.427	1.00
	20.90							
	ATOM	2726	OH2 TIP	11	25.219	50.449	80.027	1.00
	19.51							
10	ATOM	2729	OH2 TIP	12	26.686	31.635	75.090	1.00
	13.82							
	ATOM	2732	OH2 TIP	13	25.361	21.684	76.987	1.00
	26.96							
	ATOM	2735	OH2 TIP	14	3.847	51.668	76.148	1.00
	22.21							
15	ATOM	2738	OH2 TIP	15	33.052	40.009	77.678	1.00
	32.58							
	ATOM	2741	OH2 TIP	16	23.215	20.551	78.038	1.00
	29.80							
	ATOM	2744	OH2 TIP	17	7.654	54.028	63.788	1.00
20	34.59							
	ATOM	2747	OH2 TIP	18	28.141	56.263	74.474	1.00
	22.00							
	ATOM	2750	OH2 TIP	19	22.179	18.839	82.211	1.00
	26.18							
25	ATOM	2753	OH2 TIP	20	13.275	34.109	76.607	1.00
	22.45							
	ATOM	2756	OH2 TIP	21	7.198	57.427	104.428	1.00
	22.43							
30	ATOM	2759	OH2 TIP	22	35.735	44.087	79.480	1.00
	33.94							
	ATOM	2762	OH2 TIP	23	8.540	65.595	69.023	1.00
	24.56							
	ATOM	2765	OH2 TIP	24	22.270	28.066	79.324	1.00
	22.91							
35	ATOM	2768	OH2 TIP	25	14.107	69.026	73.845	1.00
	31.41							
	ATOM	2771	OH2 TIP	26	13.696	55.586	79.458	1.00
	22.90							
	ATOM	2774	OH2 TIP	27	4.349	54.682	67.141	1.00
40	45.29							
	ATOM	2777	OH2 TIP	28	6.680	45.227	67.941	1.00
	43.31							
	ATOM	2780	OH2 TIP	29	24.714	78.648	73.916	1.00
	17.34							
45	ATOM	2783	OH2 TIP	30	30.134	59.806	72.383	1.00
	29.23							
	ATOM	2786	OH2 TIP	31	26.035	23.821	78.463	1.00
	21.36							
	ATOM	2789	OH2 TIP	32	3.066	56.997	68.078	1.00
50	28.45							
	ATOM	2792	OH2 TIP	33	6.610	51.972	70.152	1.00
	23.35							
	ATOM	2795	OH2 TIP	34	26.470	70.439	71.773	1.00
	36.32							
55	ATOM	2798	OH2 TIP	35	30.259	41.069	81.623	1.00
	23.00							
	ATOM	2801	OH2 TIP	36	13.095	71.374	72.576	1.00
	42.40							

	ATOM	2804	OH2 TIP	37	29.729	18.036	80.754	1.00
	33.66							
	ATOM	2807	OH2 TIP	38	36.082	38.615	74.443	1.00
	37.20							
5	ATOM	2810	OH2 TIP	39	29.667	65.962	75.095	1.00
	56.18							
	ATOM	2813	OH2 TIP	40	16.535	52.578	84.855	1.00
	32.05							
10	ATOM	2816	OH2 TIP	41	4.169	43.760	85.732	1.00
	30.89							
	ATOM	2819	OH2 TIP	42	29.884	58.322	74.618	1.00
	17.65							
	ATOM	2822	OH2 TIP	43	15.951	20.096	79.975	1.00
	25.65							
15	ATOM	2825	OH2 TIP	44	4.646	47.648	75.172	1.00
	35.85							
	ATOM	2828	OH2 TIP	45	15.058	76.771	76.303	1.00
	30.45							
20	ATOM	2831	OH2 TIP	46	6.244	59.942	101.309	1.00
	35.15							
	ATOM	2834	OH2 TIP	47	14.040	45.715	83.639	1.00
	18.86							
	ATOM	2837	OH2 TIP	48	14.202	25.165	81.284	1.00
	34.29							
25	ATOM	2840	OH2 TIP	49	10.663	40.652	67.185	1.00
	26.39							
	ATOM	2843	OH2 TIP	50	33.301	41.942	62.513	1.00
	35.25							
30	ATOM	2846	OH2 TIP	51	6.527	57.868	77.114	1.00
	53.32							
	ATOM	2849	OH2 TIP	52	17.044	28.731	80.298	1.00
	36.84							
	ATOM	2852	OH2 TIP	53	6.062	57.571	65.730	1.00
	30.27							
35	ATOM	2855	OH2 TIP	54	17.822	52.756	80.733	1.00
	34.91							
	ATOM	2858	OH2 TIP	55	11.552	33.271	69.618	1.00
	32.40							
40	ATOM	2861	OH2 TIP	56	12.856	35.833	79.201	1.00
	22.14							
	ATOM	2864	OH2 TIP	57	40.066	43.507	77.613	1.00
	50.14							
	ATOM	2867	OH2 TIP	58	2.995	17.966	92.504	1.00
	37.28							
45	ATOM	2870	OH2 TIP	59	13.311	23.566	95.035	1.00
	47.12							
	ATOM	2873	OH2 TIP	60	11.795	37.974	66.135	1.00
	36.11							
50	ATOM	2876	OH2 TIP	61	24.504	67.408	74.469	1.00
	35.25							
	ATOM	2879	OH2 TIP	62	43.357	40.085	77.338	1.00
	51.90							
	ATOM	2882	OH2 TIP	63	1.393	21.671	100.291	1.00
	33.39							
55	ATOM	2885	OH2 TIP	64	11.280	66.450	68.597	1.00
	31.52							
	ATOM	2888	OH2 TIP	65	4.661	48.407	66.893	1.00
	31.00							

	ATOM	2891	OH2	TIP	66	23.517	29.080	77.018	1.00
	31.18								
	ATOM	2894	OH2	TIP	67	13.747	73.842	73.889	1.00
	26.91								
5	ATOM	2897	OH2	TIP	68	15.378	54.181	81.664	1.00
	19.28								
	ATOM	2900	OH2	TIP	69	35.556	54.625	72.574	1.00
	56.78								
10	ATOM	2903	OH2	TIP	70	25.738	53.333	58.018	1.00
	44.39								
	ATOM	2906	OH2	TIP	71	14.505	45.522	57.007	1.00
	52.07								
	ATOM	2909	OH2	TIP	72	9.631	42.340	87.085	1.00
	47.28								
15	ATOM	2912	OH2	TIP	73	24.646	26.338	78.448	1.00
	50.23								
	ATOM	2915	OH2	TIP	74	17.613	34.219	99.904	1.00
	41.24								
20	ATOM	2918	OH2	TIP	75	31.787	33.945	97.250	1.00
	76.43								
	ATOM	2921	OH2	TIP	76	29.710	33.429	98.446	1.00
	67.00								
	ATOM	2924	OH2	TIP	77	26.300	72.730	70.717	1.00
	25.94								
25	ATOM	2927	OH2	TIP	78	11.976	33.414	80.103	1.00
	24.71								
	ATOM	2930	OH2	TIP	79	29.259	62.469	72.136	1.00
	30.42								
30	ATOM	2933	OH2	TIP	80	26.839	65.527	74.362	1.00
	40.02								
	ATOM	2936	OH2	TIP	81	27.257	19.893	78.082	1.00
	32.57								
	ATOM	2939	OH2	TIP	82	29.912	36.264	82.030	1.00
	41.11								
35	ATOM	2942	OH2	TIP	84	18.856	52.421	83.223	1.00
	30.89								
	ATOM	2945	OH2	TIP	85	27.449	24.537	94.644	1.00
	62.62								
40	ATOM	2948	OH2	TIP	86	-1.546	21.109	100.288	1.00
	51.77								
	ATOM	2951	OH2	TIP	87	15.729	35.403	101.377	1.00
	39.68								
	ATOM	2954	OH2	TIP	88	34.403	37.880	76.403	1.00
	28.62								
45	ATOM	2957	OH2	TIP	89	24.265	74.217	76.897	1.00
	33.70								
	ATOM	2960	OH2	TIP	90	13.249	22.449	79.551	1.00
	32.00								
	ATOM	2963	OH2	TIP	91	9.902	52.146	79.592	1.00
50	40.91								
	ATOM	2966	OH2	TIP	92	20.101	71.150	85.234	1.00
	42.55								
	ATOM	2969	OH2	TIP	93	4.608	59.409	77.922	1.00
	43.45								
55	ATOM	2972	OH2	TIP	94	10.440	59.077	64.328	1.00
	40.61								
	ATOM	2975	OH2	TIP	95	17.443	51.837	87.380	1.00
	44.75								

	ATOM	2978	OH2 TIP	96	14.747	19.195	88.163	1.00
	32.29							
	ATOM	2981	OH2 TIP	98	22.641	31.842	72.909	1.00
	68.73							
5	ATOM	2984	OH2 TIP	99	16.410	46.201	86.092	1.00
	35.14							
	ATOM	2987	OH2 TIP	100	32.717	59.893	71.213	1.00
	53.13							
10	ATOM	2990	OH2 TIP	101	12.529	44.995	98.969	1.00
	36.54							
	ATOM	2993	OH2 TIP	102	15.282	38.471	102.107	1.00
	36.81							
	ATOM	2996	OH2 TIP	103	-1.910	21.152	94.291	1.00
	36.76							
15	ATOM	2999	OH2 TIP	104	23.386	43.084	94.045	1.00
	37.19							
	ATOM	3002	OH2 TIP	105	24.169	18.508	94.575	1.00
	54.05							
20	ATOM	3005	OH2 TIP	106	32.547	63.480	69.339	1.00
	62.31							
	ATOM	3008	OH2 TIP	107	32.770	33.673	71.653	1.00
	36.53							
	ATOM	3011	OH2 TIP	108	6.133	39.983	88.066	1.00
	48.22							
25	ATOM	3014	OH2 TIP	109	27.593	29.189	75.515	1.00
	52.79							
	ATOM	3017	OH2 TIP	110	34.714	32.216	91.918	1.00
	32.03							
30	ATOM	3020	OH2 TIP	111	5.948	50.113	63.208	1.00
	47.91							
	ATOM	3023	OH2 TIP	112	7.211	28.277	92.069	1.00
	58.25							
	ATOM	3026	OH2 TIP	113	4.659	62.123	78.278	1.00
	65.10							
35	ATOM	3029	OH2 TIP	114	12.092	21.414	95.200	1.00
	45.95							
	ATOM	3032	OH2 TIP	115	-5.762	20.102	93.377	1.00
	54.02							
40	ATOM	3035	OH2 TIP	116	34.368	49.023	60.476	1.00
	48.95							
	ATOM	3038	OH2 TIP	117	15.264	39.756	90.933	1.00
	50.11							
	ATOM	3041	OH2 TIP	118	20.473	34.315	86.628	1.00
	35.15							
45	ATOM	3044	OH2 TIP	119	12.962	30.648	72.355	1.00
	42.72							
	ATOM	3047	OH2 TIP	120	29.284	70.894	70.767	1.00
	60.04							
	ATOM	3050	OH2 TIP	121	6.144	34.703	75.934	1.00
50	47.46							
	ATOM	3053	OH2 TIP	122	26.483	74.969	74.981	1.00
	62.56							
	ATOM	3056	OH2 TIP	123	40.678	38.708	69.386	1.00
	42.80							
55	ATOM	3059	OH2 TIP	124	18.287	74.826	79.516	1.00
	35.33							
	ATOM	3062	OH2 TIP	125	24.227	25.786	95.606	1.00
	45.47							

	ATOM	3065	OH2 TIP	126	26.975	26.962	73.533	1.00
	31.23							
	ATOM	3068	OH2 TIP	127	34.377	35.809	70.653	1.00
	42.79							
5	ATOM	3071	OH2 TIP	128	9.420	66.131	80.020	1.00
	41.85							
	ATOM	3074	OH2 TIP	129	5.913	42.023	93.982	1.00
	37.93							

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Table 3  
Coordinates of Lck bound with AMP-PNP

5	B	Atom				X	Y	Z	Occ
		Type	Res	#					
10	ATOM	1	CB	LYS	231	1.385	26.773	89.461	1.00
	21.34	2	CG	LYS	231	0.537	26.769	88.245	1.00
	ATOM	3	CD	LYS	231	1.065	25.734	87.277	1.00
15	21.51	4	CE	LYS	231	0.120	25.565	86.108	1.00
	ATOM	5	NZ	LYS	231	0.728	24.648	85.080	1.00
	23.65	6	HZ1	LYS	231	0.915	23.722	85.493	1.00
20	23.61	7	HZ2	LYS	231	1.620	25.071	84.742	1.00
	ATOM	8	HZ3	LYS	231	0.075	24.561	84.274	1.00
	0.00	9	C	LYS	231	1.988	27.638	91.652	1.00
25	ATOM	10	O	LYS	231	3.059	28.227	91.744	1.00
	19.85	11	HT1	LYS	231	2.338	29.252	89.546	1.00
	ATOM	12	HT2	LYS	231	1.183	29.956	90.579	1.00
30	20.43	13	N	LYS	231	1.355	29.219	89.879	1.00
	ATOM	14	HT3	LYS	231	0.717	29.358	89.057	1.00
	0.00	15	CA	LYS	231	1.088	27.870	90.472	1.00
35	ATOM	16	N	PRO	232	1.597	26.726	92.561	1.00
	20.91	17	CD	PRO	232	0.390	25.885	92.560	1.00
	ATOM	18	CA	PRO	232	2.435	26.437	93.733	1.00
40	18.80	19	CB	PRO	232	1.579	25.470	94.538	1.00
	ATOM	20	CG	PRO	232	0.814	24.761	93.509	1.00
	18.99	21	C	PRO	232	3.705	25.766	93.253	1.00
45	ATOM	22	O	PRO	232	3.737	25.184	92.178	1.00
	17.40	23	N	TRP	233	4.744	25.851	94.063	1.00
	ATOM	24	H	TRP	233	4.653	26.278	94.938	1.00
50	18.29	25	CA	TRP	233	6.049	25.336	93.653	1.00
	ATOM								
	19.28								
55	ATOM								
	15.67								
	ATOM								
	15.72								
	ATOM								
	15.43								
	ATOM								
	0.00								
	ATOM								
	14.16								

	ATOM 13.93	26	CB	TRP	233	7.123	25.646	94.713	1.00
	ATOM 13.67	27	CG	TRP	233	6.954	24.883	96.024	1.00
5	ATOM 13.44	28	CD2	TRP	233	7.354	23.532	96.282	1.00
	ATOM 13.68	29	CE2	TRP	233	7.057	23.264	97.626	1.00
10	ATOM 13.97	30	CE3	TRP	233	7.945	22.518	95.485	1.00
	ATOM 13.30	31	CD1	TRP	233	6.443	25.356	97.181	1.00
	ATOM 12.97	32	NE1	TRP	233	6.510	24.402	98.161	1.00
15	ATOM 0.00	33	HE1	TRP	233	6.237	24.512	99.089	1.00
	ATOM 12.53	34	CZ2	TRP	233	7.313	22.031	98.220	1.00
20	ATOM 12.04	35	CZ3	TRP	233	8.207	21.261	96.095	1.00
	ATOM 12.52	36	CH2	TRP	233	7.884	21.044	97.449	1.00
	ATOM 14.34	37	C	TRP	233	6.030	23.858	93.280	1.00
25	ATOM 13.58	38	O	TRP	233	6.738	23.462	92.380	1.00
	ATOM 13.99	39	N	TRP	234	5.163	23.064	93.912	1.00
30	ATOM 0.00	40	H	TRP	234	4.556	23.452	94.570	1.00
	ATOM 14.92	41	CA	TRP	234	5.112	21.632	93.603	1.00
	ATOM 13.19	42	CB	TRP	234	4.507	20.854	94.790	1.00
35	ATOM 12.51	43	CG	TRP	234	3.124	21.289	95.147	1.00
	ATOM 12.55	44	CD2	TRP	234	2.755	22.231	96.158	1.00
40	ATOM 13.35	45	CE2	TRP	234	1.346	22.370	96.127	1.00
	ATOM 14.36	46	CE3	TRP	234	3.488	22.980	97.079	1.00
	ATOM 12.11	47	CD1	TRP	234	1.938	20.883	94.555	1.00
45	ATOM 11.94	48	NE1	TRP	234	0.874	21.538	95.149	1.00
	ATOM 0.00	49	HE1	TRP	234	-0.056	21.431	94.898	1.00
50	ATOM 13.79	50	CZ2	TRP	234	0.644	23.231	96.982	1.00
	ATOM 16.07	51	CZ3	TRP	234	2.786	23.866	97.946	1.00
	ATOM 16.13	52	CH2	TRP	234	1.373	23.975	97.886	1.00
55	ATOM 15.64	53	C	TRP	234	4.405	21.300	92.295	1.00
	ATOM 15.96	54	O	TRP	234	4.413	20.139	91.829	1.00

5	ATOM 16.35	55	N	GLU	235	3.820	22.323	91.686	1.00
	ATOM 0.00	56	H	GLU	235	3.838	23.203	92.107	1.00
	ATOM 18.95	57	CA	GLU	235	3.152	22.179	90.402	1.00
	ATOM 19.45	58	CB	GLU	235	1.672	22.623	90.489	1.00
	ATOM 21.99	59	CG	GLU	235	0.789	21.713	91.394	1.00
10	ATOM 24.05	60	CD	GLU	235	-0.684	21.852	91.119	1.00
	ATOM 26.95	61	OE1	GLU	235	-1.084	22.883	90.512	1.00
	ATOM 24.79	62	OE2	GLU	235	-1.450	20.942	91.542	1.00
15	ATOM 19.29	63	C	GLU	235	3.885	23.036	89.360	1.00
	ATOM 20.91	64	O	GLU	235	3.701	22.834	88.169	1.00
	ATOM 19.88	65	N	ASP	236	4.691	23.997	89.811	1.00
	ATOM 0.00	66	H	ASP	236	4.823	24.117	90.773	1.00
20	ATOM 20.52	67	CA	ASP	236	5.384	24.897	88.880	1.00
	ATOM 21.88	68	CB	ASP	236	5.972	26.104	89.645	1.00
	ATOM 24.16	69	CG	ASP	236	6.438	27.211	88.724	1.00
25	ATOM 25.94	70	OD1	ASP	236	5.609	27.763	87.958	1.00
	ATOM 26.72	71	OD2	ASP	236	7.641	27.543	88.786	1.00
	ATOM 19.94	72	C	ASP	236	6.465	24.212	88.035	1.00
30	ATOM 20.22	73	O	ASP	236	7.405	23.589	88.560	1.00
	ATOM 19.19	74	N	GLU	237	6.363	24.421	86.726	1.00
	ATOM 0.00	75	H	GLU	237	5.643	24.976	86.428	1.00
35	ATOM 18.93	76	CA	GLU	237	7.291	23.876	85.759	1.00
	ATOM 21.53	77	CB	GLU	237	6.767	24.171	84.336	1.00
	ATOM 25.16	78	CG	GLU	237	5.949	25.481	84.159	1.00
40	ATOM 26.69	79	CD	GLU	237	4.521	25.450	84.779	1.00
	ATOM 28.81	80	OE1	GLU	237	3.679	24.578	84.402	1.00
	ATOM 28.14	81	OE2	GLU	237	4.253	26.327	85.629	1.00
45	ATOM 18.12	82	C	GLU	237	8.740	24.369	85.919	1.00
	ATOM 18.57	83	O	GLU	237	9.684	23.709	85.466	1.00



	ATOM	84	N	TRP	238	8.924	25.472	86.635	1.00
	16.91								
	ATOM	85	H	TRP	238	8.164	25.919	87.048	1.00
	0.00								
5	ATOM	86	CA	TRP	238	10.266	26.021	86.808	1.00
	16.06								
	ATOM	87	CB	TRP	238	10.289	27.557	86.586	1.00
	16.99								
10	ATOM	88	CG	TRP	238	10.110	28.031	85.147	1.00
	18.25								
	ATOM	89	CD2	TRP	238	8.886	28.388	84.524	1.00
	19.01								
	ATOM	90	CE2	TRP	238	9.200	28.819	83.207	1.00
	18.54								
15	ATOM	91	CE3	TRP	238	7.547	28.380	84.949	1.00
	18.64								
	ATOM	92	CD1	TRP	238	11.090	28.244	84.221	1.00
	17.51								
20	ATOM	93	NE1	TRP	238	10.558	28.711	83.052	1.00
	18.52								
	ATOM	94	HE1	TRP	238	11.049	28.951	82.237	1.00
	0.00								
	ATOM	95	CZ2	TRP	238	8.216	29.244	82.317	1.00
	20.29								
25	ATOM	96	CZ3	TRP	238	6.582	28.790	84.075	1.00
	20.70								
	ATOM	97	CH2	TRP	238	6.908	29.220	82.767	1.00
	20.69								
30	ATOM	98	C	TRP	238	10.976	25.689	88.109	1.00
	14.67								
	ATOM	99	O	TRP	238	12.196	25.840	88.205	1.00
	14.18								
	ATOM	100	N	GLU	239	10.264	25.185	89.119	1.00
	13.40								
35	ATOM	101	H	GLU	239	9.309	25.008	89.012	1.00
	0.00								
	ATOM	102	CA	GLU	239	10.915	24.882	90.388	1.00
	12.41								
40	ATOM	103	CB	GLU	239	9.893	24.602	91.513	1.00
	13.82								
	ATOM	104	CG	GLU	239	10.526	24.406	92.876	1.00
	13.92								
	ATOM	105	CD	GLU	239	10.802	25.700	93.640	1.00
	15.04								
45	ATOM	106	OE1	GLU	239	10.143	26.716	93.321	1.00
	15.02								
	ATOM	107	OE2	GLU	239	11.666	25.716	94.544	1.00
	14.50								
	ATOM	108	C	GLU	239	11.804	23.648	90.233	1.00
50	12.24								
	ATOM	109	O	GLU	239	11.391	22.668	89.611	1.00
	13.77								
	ATOM	110	N	VAL	240	13.023	23.735	90.766	1.00
	11.71								
55	ATOM	111	H	VAL	240	13.299	24.560	91.203	1.00
	0.00								
	ATOM	112	CA	VAL	240	13.945	22.598	90.744	1.00
	12.51								

	ATOM 12.10	113	CB	VAL	240	15.105	22.733	89.670	1.00
	ATOM 13.18	114	CG1	VAL	240	14.585	22.850	88.277	1.00
5	ATOM 10.76	115	CG2	VAL	240	16.071	23.859	90.061	1.00
	ATOM 12.39	116	C	VAL	240	14.616	22.422	92.110	1.00
10	ATOM 12.42	117	O	VAL	240	14.841	23.375	92.870	1.00
	ATOM 11.86	118	N	PRO	241	14.908	21.154	92.491	1.00
	ATOM 12.24	119	CD	PRO	241	14.473	19.902	91.840	1.00
15	ATOM 12.65	120	CA	PRO	241	15.568	20.912	93.767	1.00
	ATOM 11.78	121	CB	PRO	241	15.730	19.372	93.775	1.00
20	ATOM 12.22	122	CG	PRO	241	14.565	18.895	92.974	1.00
	ATOM 11.85	123	C	PRO	241	16.962	21.570	93.740	1.00
	ATOM 12.46	124	O	PRO	241	17.620	21.555	92.693	1.00
25	ATOM 12.89	125	N	ARG	242	17.384	22.198	94.832	1.00
	ATOM 0.00	126	H	ARG	242	16.795	22.250	95.619	1.00
30	ATOM 12.40	127	CA	ARG	242	18.708	22.830	94.861	1.00
	ATOM 14.75	128	CB	ARG	242	18.950	23.533	96.193	1.00
	ATOM 15.25	129	CG	ARG	242	20.091	24.535	96.113	1.00
35	ATOM 17.56	130	CD	ARG	242	20.541	25.070	97.460	1.00
	ATOM 18.07	131	NE	ARG	242	19.422	25.556	98.268	1.00
40	ATOM 0.00	132	HE	ARG	242	19.107	24.977	98.985	1.00
	ATOM 19.12	133	CZ	ARG	242	18.799	26.724	98.110	1.00
	ATOM 19.73	134	NH1	ARG	242	19.166	27.577	97.161	1.00
45	ATOM 0.00	135	HH11	ARG	242	19.915	27.339	96.534	1.00
	ATOM 0.00	136	HH12	ARG	242	18.676	28.436	97.031	1.00
50	ATOM 18.83	137	NH2	ARG	242	17.780	27.032	98.902	1.00
	ATOM 0.00	138	HH21	ARG	242	17.506	26.405	99.623	1.00
	ATOM 0.00	139	HH22	ARG	242	17.312	27.908	98.781	1.00
55	ATOM 12.95	140	C	ARG	242	19.895	21.875	94.555	1.00
	ATOM 11.99	141	O	ARG	242	20.894	22.277	93.987	1.00

	ATOM 13.41	142	N	GLU	243	19.697	20.585	94.822	1.00
	ATOM 0.00	143	H	GLU	243	18.842	20.286	95.170	1.00
5	ATOM 14.21	144	CA	GLU	243	20.754	19.606	94.572	1.00
	ATOM 16.12	145	CB	GLU	243	20.342	18.237	95.178	1.00
10	ATOM 21.22	146	CG	GLU	243	20.061	18.260	96.691	1.00
	ATOM 22.86	147	CD	GLU	243	18.709	18.847	97.095	1.00
	ATOM 22.70	148	OE1	GLU	243	17.795	18.975	96.259	1.00
15	ATOM 25.06	149	OE2	GLU	243	18.539	19.103	98.316	1.00
	ATOM 12.77	150	C	GLU	243	21.102	19.446	93.076	1.00
20	ATOM 12.70	151	O	GLU	243	22.152	18.874	92.721	1.00
	ATOM 11.90	152	N	THR	244	20.240	19.959	92.200	1.00
	ATOM 0.00	153	H	THR	244	19.429	20.393	92.526	1.00
25	ATOM 11.33	154	CA	THR	244	20.480	19.869	90.761	1.00
	ATOM 11.58	155	CB	THR	244	19.178	20.061	89.922	1.00
30	ATOM 12.20	156	OG1	THR	244	18.722	21.409	90.111	1.00
	ATOM 0.00	157	HG1	THR	244	18.543	21.529	91.048	1.00
	ATOM 11.12	158	CG2	THR	244	18.068	19.018	90.329	1.00
35	ATOM 10.60	159	C	THR	244	21.513	20.905	90.309	1.00
	ATOM 9.84	160	O	THR	244	22.005	20.841	89.187	1.00
40	ATOM 10.02	161	N	LEU	245	21.893	21.813	91.196	1.00
	ATOM 0.00	162	H	LEU	245	21.570	21.783	92.115	1.00
	ATOM 10.44	163	CA	LEU	245	22.835	22.865	90.806	1.00
45	ATOM 9.40	164	CB	LEU	245	22.179	24.221	91.148	1.00
	ATOM 10.29	165	CG	LEU	245	20.838	24.462	90.428	1.00
50	ATOM 11.97	166	CD1	LEU	245	20.055	25.579	91.158	1.00
	ATOM 11.52	167	CD2	LEU	245	21.079	24.863	88.989	1.00
	ATOM 11.15	168	C	LEU	245	24.183	22.828	91.494	1.00
55	ATOM 13.40	169	O	LEU	245	24.257	22.514	92.699	1.00
	ATOM 10.77	170	N	LYS	246	25.230	23.052	90.715	1.00

5	ATOM 0.00	171	H	LYS	246	25.086	23.177	89.756	1.00
	ATOM 12.14	172	CA	LYS	246	26.597	23.139	91.215	1.00
	ATOM 13.85	173	CB	LYS	246	27.528	22.118	90.572	1.00
	ATOM 16.33	174	CG	LYS	246	28.935	22.225	91.133	1.00
	ATOM 19.11	175	CD	LYS	246	29.970	21.564	90.205	1.00
10	ATOM 20.77	176	CE	LYS	246	31.305	21.487	90.910	1.00
	ATOM 22.87	177	NZ	LYS	246	32.177	20.585	90.041	1.00
	ATOM 0.00	178	HZ1	LYS	246	32.285	20.988	89.106	1.00
15	ATOM 0.00	179	HZ2	LYS	246	31.712	19.652	89.977	1.00
	ATOM 0.00	180	HZ3	LYS	246	33.102	20.464	90.502	1.00
	ATOM 10.91	181	C	LYS	246	27.051	24.538	90.814	1.00
20	ATOM 10.91	182	O	LYS	246	27.037	24.876	89.642	1.00
	ATOM 9.61	183	N	LEU	247	27.367	25.383	91.798	0.60
	ATOM 0.00	184	H	LEU	247	27.319	25.075	92.714	1.00
25	ATOM 9.63	185	CA	LEU	247	27.815	26.761	91.532	0.60
	ATOM 9.83	186	CB	LEU	247	27.348	27.712	92.652	0.60
	ATOM 10.31	187	CG	LEU	247	25.846	28.129	92.642	0.60
30	ATOM 13.23	188	CD1	LEU	247	24.882	26.939	92.630	0.60
	ATOM 11.95	189	CD2	LEU	247	25.564	29.031	93.833	0.60
	ATOM 10.71	190	C	LEU	247	29.327	26.666	91.428	0.60
35	ATOM 10.43	191	O	LEU	247	29.973	26.180	92.342	0.60
	ATOM 11.88	192	N	VAL	248	29.873	27.137	90.313	1.00
	ATOM 0.00	193	H	VAL	248	29.310	27.614	89.675	1.00
40	ATOM 13.11	194	CA	VAL	248	31.310	26.991	90.003	1.00
	ATOM 13.53	195	CB	VAL	248	31.498	26.319	88.602	1.00
	ATOM 14.85	196	CG1	VAL	248	32.978	26.241	88.210	1.00
45	ATOM 14.81	197	CG2	VAL	248	30.899	24.899	88.605	1.00
	ATOM 14.16	198	C	VAL	248	32.186	28.216	90.080	1.00
	ATOM 14.80	199	O	VAL	248	33.270	28.175	90.679	1.00

	ATOM	200	N	GLU	249	31.725	29.312	89.495	1.00
	13.26								
	ATOM	201	H	GLU	249	30.834	29.309	89.093	1.00
	0.00								
5	ATOM	202	CA	GLU	249	32.508	30.530	89.468	1.00
	13.80								
	ATOM	203	CB	GLU	249	33.134	30.677	88.091	1.00
	15.55								
10	ATOM	204	CG	GLU	249	34.014	31.912	87.944	1.00
	18.90								
	ATOM	205	CD	GLU	249	34.405	32.210	86.510	1.00
	21.24								
	ATOM	206	OE1	GLU	249	34.135	31.393	85.593	1.00
	24.08								
15	ATOM	207	OE2	GLU	249	34.913	33.319	86.265	1.00
	22.80								
	ATOM	208	C	GLU	249	31.631	31.727	89.746	1.00
	13.85								
20	ATOM	209	O	GLU	249	30.599	31.893	89.107	1.00
	13.22								
	ATOM	210	N	ARG	250	32.032	32.565	90.691	1.00
	13.43								
	ATOM	211	H	ARG	250	32.845	32.390	91.203	1.00
	0.00								
25	ATOM	212	CA	ARG	250	31.238	33.756	90.975	1.00
	13.91								
	ATOM	213	CB	ARG	250	31.424	34.209	92.429	1.00
	15.62								
30	ATOM	214	CG	ARG	250	30.454	35.361	92.785	1.00
	18.83								
	ATOM	215	CD	ARG	250	30.548	35.864	94.224	1.00
	21.47								
	ATOM	216	NE	ARG	250	31.929	35.904	94.643	1.00
	24.18								
35	ATOM	217	HE	ARG	250	32.576	35.446	94.077	1.00
	0.00								
	ATOM	218	CZ	ARG	250	32.379	36.480	95.742	1.00
	25.74								
40	ATOM	219	NH1	ARG	250	31.558	37.136	96.561	1.00
	27.48								
	ATOM	220	HH11	ARG	250	30.581	37.188	96.376	1.00
	0.00								
	ATOM	221	HH12	ARG	250	31.927	37.552	97.403	1.00
	0.00								
45	ATOM	222	NH2	ARG	250	33.593	36.137	96.166	1.00
	28.18								
	ATOM	223	HH21	ARG	250	34.096	35.413	95.681	1.00
	0.00								
	ATOM	224	HH22	ARG	250	33.955	36.514	97.011	1.00
50	0.00								
	ATOM	225	C	ARG	250	31.596	34.847	89.970	1.00
	13.66								
	ATOM	226	O	ARG	250	32.789	35.114	89.719	1.00
	15.10								
55	ATOM	227	N	LEU	251	30.567	35.378	89.300	1.00
	12.58								
	ATOM	228	H	LEU	251	29.669	35.062	89.490	1.00
	0.00								

5	ATOM 11.75	229	CA	LEU	251	30.723	36.409	88.295	1.00
	ATOM 12.32	230	CB	LEU	251	29.719	36.195	87.157	1.00
	ATOM 11.37	231	CG	LEU	251	29.810	34.803	86.565	1.00
	ATOM 11.33	232	CD1	LEU	251	28.787	34.682	85.487	1.00
	ATOM 12.76	233	CD2	LEU	251	31.198	34.554	86.008	1.00
10	ATOM 12.74	234	C	LEU	251	30.524	37.797	88.874	1.00
	ATOM 13.60	235	O	LEU	251	31.043	38.767	88.320	1.00
	ATOM 12.51	236	N	GLY	252	29.736	37.884	89.939	1.00
20	ATOM 0.00	237	H	GLY	252	29.333	37.075	90.321	1.00
	ATOM 13.79	238	CA	GLY	252	29.458	39.185	90.521	1.00
	ATOM 13.34	239	C	GLY	252	28.902	39.056	91.900	1.00
	ATOM 13.87	240	O	GLY	252	28.356	38.030	92.292	1.00
25	ATOM 14.74	241	N	ALA	253	29.086	40.120	92.672	1.00
	ATOM 0.00	242	H	ALA	253	29.577	40.898	92.327	1.00
	ATOM 16.13	243	CA	ALA	253	28.596	40.172	94.040	1.00
30	ATOM 15.97	244	CB	ALA	253	29.648	39.731	95.035	1.00
	ATOM 17.39	245	C	ALA	253	28.179	41.593	94.332	1.00
	ATOM 17.53	246	O	ALA	253	28.882	42.558	94.005	1.00
35	ATOM 17.78	247	N	GLY	254	27.033	41.707	94.977	1.00
	ATOM 0.00	248	H	GLY	254	26.551	40.907	95.239	1.00
	ATOM 18.08	249	CA	GLY	254	26.517	43.011	95.317	1.00
45	ATOM 17.45	250	C	GLY	254	25.728	42.948	96.598	1.00
	ATOM 17.19	251	O	GLY	254	25.644	41.956	97.325	1.00
	ATOM 18.33	252	N	GLN	255	25.101	44.066	96.868	1.00
	ATOM 0.00	253	H	GLN	255	25.164	44.813	96.258	1.00
50	ATOM 19.13	254	CA	GLN	255	24.301	44.213	98.045	1.00
	ATOM 19.95	255	CB	GLN	255	23.771	45.594	97.946	1.00
55	ATOM 22.32	256	CG	GLN	255	23.078	46.146	99.052	1.00
	ATOM 24.50	257	CD	GLN	255	22.847	47.590	98.718	1.00

	ATOM	258	OE1	GLN	255	22.188	48.281	99.453	1.00
	26.43								
	ATOM	259	NE2	GLN	255	23.403	48.048	97.588	1.00
	26.54								
5	ATOM	260	HE21	GLN	255	23.980	47.407	97.016	1.00
	0.00								
	ATOM	261	HE22	GLN	255	23.348	48.942	97.308	1.00
	0.00								
10	ATOM	262	C	GLN	255	23.114	43.280	98.164	1.00
	18.89								
	ATOM	263	O	GLN	255	22.715	42.912	99.277	1.00
	18.97								
	ATOM	264	N	PHE	256	22.566	42.891	97.016	1.00
	18.57								
15	ATOM	265	H	PHE	256	22.967	43.162	96.160	1.00
	0.00								
	ATOM	266	CA	PHE	256	21.387	42.039	97.045	1.00
	18.53								
	ATOM	267	CB	PHE	256	20.361	42.561	96.047	1.00
	18.42								
20	ATOM	268	CG	PHE	256	20.043	44.006	96.223	1.00
	19.55								
	ATOM	269	CD1	PHE	256	19.660	44.487	97.462	1.00
	19.76								
25	ATOM	270	CD2	PHE	256	20.163	44.889	95.149	1.00
	19.70								
	ATOM	271	CE1	PHE	256	19.391	45.854	97.651	1.00
	20.60								
	ATOM	272	CE2	PHE	256	19.905	46.252	95.312	1.00
	20.72								
30	ATOM	273	CZ	PHE	256	19.517	46.734	96.572	1.00
	21.23								
	ATOM	274	C	PHE	256	21.689	40.589	96.752	1.00
	18.00								
35	ATOM	275	O	PHE	256	20.764	39.761	96.636	1.00
	16.87								
	ATOM	276	N	GLY	257	22.973	40.284	96.577	1.00
	17.57								
	ATOM	277	H	GLY	257	23.667	40.987	96.619	1.00
	0.00								
40	ATOM	278	CA	GLY	257	23.337	38.913	96.293	1.00
	17.34								
	ATOM	279	C	GLY	257	24.491	38.688	95.333	1.00
	17.02								
45	ATOM	280	O	GLY	257	25.258	39.602	95.011	1.00
	17.68								
	ATOM	281	N	GLU	258	24.501	37.481	94.753	1.00
	14.48								
	ATOM	282	H	GLU	258	23.782	36.853	94.960	1.00
	0.00								
50	ATOM	283	CA	GLU	258	25.569	37.077	93.856	1.00
	14.43								
	ATOM	284	CB	GLU	258	26.448	36.038	94.559	1.00
	15.81								
55	ATOM	285	CG	GLU	258	27.085	36.578	95.872	1.00
	19.83								
	ATOM	286	CD	GLU	258	28.011	35.584	96.576	1.00
	22.41								

5	ATOM 24.84	287	OE1	GLU	258	27.731	34.360	96.582	1.00
	ATOM 26.85	288	OE2	GLU	258	29.021	36.035	97.165	1.00
	ATOM 12.27	289	C	GLU	258	25.069	36.481	92.551	1.00
10	ATOM 12.35	290	O	GLU	258	23.942	36.024	92.462	1.00
	ATOM 9.83	291	N	VAL	259	25.939	36.480	91.562	0.77
	ATOM 0.00	292	H	VAL	259	26.806	36.897	91.710	1.00
15	ATOM 8.93	293	CA	VAL	259	25.657	35.863	90.262	0.77
	ATOM 9.26	294	CB	VAL	259	25.650	36.867	89.108	0.77
	ATOM 8.23	295	CG1	VAL	259	25.414	36.115	87.754	0.77
20	ATOM 10.50	296	CG2	VAL	259	24.500	37.872	89.347	0.77
	ATOM 8.47	297	C	VAL	259	26.795	34.888	90.038	0.77
	ATOM 7.91	298	O	VAL	259	27.958	35.272	90.143	0.77
25	ATOM 7.79	299	N	TRP	260	26.454	33.642	89.724	1.00
	ATOM 0.00	300	H	TRP	260	25.509	33.403	89.658	1.00
	ATOM 8.79	301	CA	TRP	260	27.449	32.614	89.503	1.00
30	ATOM 10.03	302	CB	TRP	260	27.298	31.522	90.561	1.00
	ATOM 12.72	303	CG	TRP	260	27.700	31.898	91.938	1.00
	ATOM 13.43	304	CD2	TRP	260	28.837	31.392	92.653	1.00
35	ATOM 15.26	305	CE2	TRP	260	28.838	32.008	93.918	1.00
	ATOM 14.66	306	CE3	TRP	260	29.836	30.464	92.335	1.00
	ATOM 12.67	307	CD1	TRP	260	27.066	32.770	92.780	1.00
40	ATOM 15.10	308	NE1	TRP	260	27.763	32.834	93.984	1.00
	ATOM 0.00	309	HE1	TRP	260	27.518	33.395	94.742	1.00
	ATOM 16.09	310	CZ2	TRP	260	29.825	31.723	94.876	1.00
45	ATOM 16.92	311	CZ3	TRP	260	30.813	30.188	93.297	1.00
	ATOM 16.41	312	CH2	TRP	260	30.796	30.815	94.547	1.00
	ATOM 8.56	313	C	TRP	260	27.242	31.864	88.202	1.00
50	ATOM 9.60	314	O	TRP	260	26.132	31.790	87.674	1.00
	ATOM 8.43	315	N	MET	261	28.341	31.349	87.662	1.00



	ATOM	316	H	MET	261	29.227	31.596	87.991	1.00
	0.00								
	ATOM	317	CA	MET	261	28.222	30.439	86.541	1.00
	7.71								
5	ATOM	318	CB	MET	261	29.469	30.486	85.644	1.00
	9.06								
	ATOM	319	CG	MET	261	29.476	29.473	84.493	1.00
	9.93								
10	ATOM	320	SD	MET	261	30.097	27.818	85.014	1.00
	12.84								
	ATOM	321	CE	MET	261	31.911	28.132	85.302	1.00
	15.22								
	ATOM	322	C	MET	261	28.150	29.077	87.245	1.00
	8.44								
15	ATOM	323	O	MET	261	28.814	28.856	88.244	1.00
	8.95								
	ATOM	324	N	GLY	262	27.295	28.195	86.773	1.00
	8.18								
	ATOM	325	H	GLY	262	26.731	28.417	86.018	1.00
	0.00								
20	ATOM	326	CA	GLY	262	27.203	26.878	87.413	1.00
	8.32								
	ATOM	327	C	GLY	262	26.648	25.894	86.401	1.00
	5.91								
25	ATOM	328	O	GLY	262	26.517	26.175	85.206	1.00
	5.98								
	ATOM	329	N	TYR	263	26.415	24.666	86.875	1.00
	6.89								
	ATOM	330	H	TYR	263	26.583	24.448	87.807	1.00
	0.00								
30	ATOM	331	CA	TYR	263	25.861	23.637	85.987	1.00
	7.28								
	ATOM	332	CB	TYR	263	26.889	22.496	85.841	1.00
	8.06								
35	ATOM	333	CG	TYR	263	28.080	22.924	85.048	1.00
	10.09								
	ATOM	334	CD1	TYR	263	28.044	22.868	83.662	1.00
	10.54								
40	ATOM	335	CE1	TYR	263	29.066	23.364	82.901	1.00
	14.47								
	ATOM	336	CD2	TYR	263	29.184	23.476	85.673	1.00
	12.72								
	ATOM	337	CE2	TYR	263	30.221	23.978	84.935	1.00
	14.68								
45	ATOM	338	CZ	TYR	263	30.160	23.926	83.547	1.00
	15.68								
	ATOM	339	OH	TYR	263	31.170	24.487	82.778	1.00
	20.07								
	ATOM	340	HH	TYR	263	30.989	24.389	81.857	1.00
	0.00								
50	ATOM	341	C	TYR	263	24.615	23.016	86.596	1.00
	6.81								
	ATOM	342	O	TYR	263	24.563	22.811	87.826	1.00
	8.23								
55	ATOM	343	N	TYR	264	23.617	22.767	85.750	1.00
	7.63								
	ATOM	344	H	TYR	264	23.733	23.013	84.815	1.00
	0.00								

	ATOM 8.60	345	CA	TYR	264	22.369	22.110	86.128	1.00
	ATOM 9.34	346	CB	TYR	264	21.156	22.808	85.446	1.00
5	ATOM 9.75	347	CG	TYR	264	19.866	22.028	85.585	1.00
	ATOM 10.24	348	CD1	TYR	264	19.102	22.129	86.754	1.00
10	ATOM 10.67	349	CE1	TYR	264	17.959	21.354	86.929	1.00
	ATOM 11.81	350	CD2	TYR	264	19.453	21.136	84.586	1.00
	ATOM 11.92	351	CE2	TYR	264	18.282	20.337	84.756	1.00
15	ATOM 12.03	352	CZ	TYR	264	17.562	20.474	85.941	1.00
	ATOM 14.04	353	OH	TYR	264	16.420	19.720	86.154	1.00
20	ATOM 0.00	354	HH	TYR	264	16.040	19.932	86.999	1.00
	ATOM 8.08	355	C	TYR	264	22.492	20.651	85.665	1.00
	ATOM 7.72	356	O	TYR	264	22.826	20.368	84.513	1.00
25	ATOM 8.42	357	N	ASN	265	22.291	19.749	86.621	1.00
	ATOM 0.00	358	H	ASN	265	22.114	20.076	87.520	1.00
30	ATOM 8.83	359	CA	ASN	265	22.350	18.290	86.352	1.00
	ATOM 10.23	360	CB	ASN	265	21.111	17.794	85.571	1.00
	ATOM 12.04	361	CG	ASN	265	19.909	17.513	86.449	1.00
35	ATOM 16.27	362	OD1	ASN	265	18.922	16.924	85.971	1.00
	ATOM 10.60	363	ND2	ASN	265	19.987	17.846	87.700	1.00
40	ATOM 0.00	364	HD21	ASN	265	20.791	18.278	88.040	1.00
	ATOM 0.00	365	HD22	ASN	265	19.200	17.675	88.263	1.00
	ATOM 8.05	366	C	ASN	265	23.655	17.896	85.654	1.00
45	ATOM 9.88	367	O	ASN	265	23.664	17.133	84.672	1.00
	ATOM 7.83	368	N	GLY	266	24.734	18.494	86.141	1.00
50	ATOM 0.00	369	H	GLY	266	24.621	19.165	86.832	1.00
	ATOM 6.92	370	CA	GLY	266	26.076	18.161	85.677	1.00
	ATOM 6.25	371	C	GLY	266	26.558	18.718	84.367	1.00
55	ATOM 9.19	372	O	GLY	266	27.690	19.215	84.313	1.00
	ATOM 2.00	373	N	HIS	267	25.705	18.747	83.348	0.49

	ATOM	374	H	HIS	267	24.768	18.516	83.488	1.00
	0.00								
	ATOM	375	CA	HIS	267	26.132	19.118	82.007	0.49
	2.00								
5	ATOM	376	CB	HIS	267	25.644	18.007	81.071	0.49
	2.00								
	ATOM	377	CG	HIS	267	26.288	16.707	81.346	0.49
	2.00								
10	ATOM	378	CD2	HIS	267	27.610	16.377	81.362	0.49
	2.00								
	ATOM	379	ND1	HIS	267	25.611	15.575	81.738	0.49
	2.60								
	ATOM	380	HD1	HIS	267	24.637	15.483	81.811	1.00
	0.00								
15	ATOM	381	CE1	HIS	267	26.481	14.607	81.990	0.49
	2.00								
	ATOM	382	NE2	HIS	267	27.697	15.089	81.760	0.49
	3.36								
	ATOM	383	HE2	HIS	267	28.533	14.590	81.874	1.00
20	0.00								
	ATOM	384	C	HIS	267	25.678	20.418	81.398	0.49
	2.00								
	ATOM	385	O	HIS	267	26.213	20.808	80.365	0.49
	2.30								
25	ATOM	386	N	THR	268	24.710	21.092	82.013	1.00
	5.29								
	ATOM	387	H	THR	268	24.397	20.822	82.896	1.00
	0.00								
	ATOM	388	CA	THR	268	24.145	22.270	81.320	1.00
30	6.10								
	ATOM	389	CB	THR	268	22.609	22.169	81.303	1.00
	7.20								
	ATOM	390	OG1	THR	268	22.235	20.980	80.601	1.00
	7.82								
35	ATOM	391	HG1	THR	268	22.598	20.214	81.047	1.00
	0.00								
	ATOM	392	CG2	THR	268	22.010	23.369	80.495	1.00
	7.70								
	ATOM	393	C	THR	268	24.549	23.551	82.050	1.00
40	5.45								
	ATOM	394	O	THR	268	24.164	23.747	83.189	1.00
	6.14								
	ATOM	395	N	LYS	269	25.347	24.370	81.356	1.00
	6.47								
45	ATOM	396	H	LYS	269	25.557	24.141	80.425	1.00
	0.00								
	ATOM	397	CA	LYS	269	25.901	25.592	81.925	1.00
	6.35								
	ATOM	398	CB	LYS	269	26.940	26.166	80.973	1.00
50	7.90								
	ATOM	399	CG	LYS	269	27.866	27.140	81.613	1.00
	10.78								
	ATOM	400	CD	LYS	269	29.023	27.358	80.618	1.00
	13.81								
55	ATOM	401	CE	LYS	269	30.233	27.795	81.340	1.00
	17.11								
	ATOM	402	NZ	LYS	269	31.390	27.884	80.376	1.00
	19.10								

5	ATOM 0.00	403	HZ1	LYS	269	31.172	28.567	79.641	1.00
	ATOM 0.00	404	HZ2	LYS	269	31.566	26.944	79.962	1.00
	ATOM 0.00	405	HZ3	LYS	269	32.243	28.180	80.907	1.00
10	ATOM 7.04	406	C	LYS	269	24.753	26.567	82.074	1.00
	ATOM 7.34	407	O	LYS	269	23.952	26.722	81.169	1.00
	ATOM 5.91	408	N	VAL	270	24.690	27.205	83.238	1.00
15	ATOM 0.00	409	H	VAL	270	25.398	27.048	83.893	1.00
	ATOM 6.63	410	CA	VAL	270	23.629	28.177	83.546	1.00
	ATOM 6.46	411	CB	VAL	270	22.509	27.481	84.400	1.00
20	ATOM 7.32	412	CG1	VAL	270	21.803	26.405	83.568	1.00
	ATOM 7.53	413	CG2	VAL	270	23.083	26.839	85.698	1.00
	ATOM 6.17	414	C	VAL	270	24.182	29.316	84.395	1.00
25	ATOM 6.51	415	O	VAL	270	25.268	29.240	84.916	1.00
	ATOM 6.02	416	N	ALA	271	23.443	30.426	84.450	1.00
	ATOM 0.00	417	H	ALA	271	22.644	30.496	83.891	1.00
30	ATOM 5.74	418	CA	ALA	271	23.788	31.527	85.338	1.00
	ATOM 5.67	419	CB	ALA	271	23.574	32.853	84.648	1.00
	ATOM 5.85	420	C	ALA	271	22.814	31.423	86.540	1.00
35	ATOM 7.29	421	O	ALA	271	21.608	31.142	86.381	1.00
	ATOM 7.39	422	N	VAL	272	23.318	31.635	87.747	1.00
	ATOM 0.00	423	H	VAL	272	24.267	31.833	87.843	1.00
40	ATOM 8.08	424	CA	VAL	272	22.475	31.543	88.936	1.00
	ATOM 8.79	425	CB	VAL	272	22.969	30.428	89.899	1.00
	ATOM 9.68	426	CG1	VAL	272	22.070	30.343	91.136	1.00
45	ATOM 9.63	427	CG2	VAL	272	23.015	29.076	89.131	1.00
	ATOM 9.60	428	C	VAL	272	22.581	32.834	89.722	1.00
	ATOM 11.01	429	O	VAL	272	23.684	33.284	89.989	1.00
50	ATOM 9.34	430	N	LYS	273	21.451	33.495	89.956	1.00
	ATOM 0.00	431	H	LYS	273	20.623	33.163	89.587	1.00

	ATOM 9.94	432	CA	LYS	273	21.441	34.713	90.766	1.00
	ATOM 13.05	433	CB	LYS	273	20.613	35.821	90.094	1.00
5	ATOM 16.55	434	CG	LYS	273	20.444	36.981	91.030	1.00
	ATOM 18.34	435	CD	LYS	273	20.241	38.260	90.283	1.00
10	ATOM 18.99	436	CE	LYS	273	18.990	38.229	89.471	1.00
	ATOM 21.97	437	NZ	LYS	273	18.646	39.634	89.043	1.00
	ATOM 0.00	438	HZ1	LYS	273	19.448	40.027	88.524	1.00
15	ATOM 0.00	439	HZ2	LYS	273	18.496	40.175	89.925	1.00
	ATOM 0.00	440	HZ3	LYS	273	17.792	39.616	88.478	1.00
20	ATOM 10.21	441	C	LYS	273	20.871	34.330	92.124	1.00
	ATOM 10.49	442	O	LYS	273	19.781	33.769	92.200	1.00
	ATOM 8.89	443	N	SER	274	21.606	34.614	93.188	0.65
25	ATOM 0.00	444	H	SER	274	22.451	35.070	93.082	1.00
	ATOM 10.39	445	CA	SER	274	21.170	34.262	94.530	0.65
30	ATOM 10.95	446	CB	SER	274	22.290	33.526	95.266	0.65
	ATOM 12.46	447	OG	SER	274	23.412	34.386	95.458	0.65
	ATOM 0.00	448	HG	SER	274	23.734	34.694	94.615	1.00
35	ATOM 10.72	449	C	SER	274	20.827	35.531	95.287	0.65
	ATOM 11.54	450	O	SER	274	21.436	36.556	95.060	0.65
40	ATOM 12.75	451	N	LEU	275	19.802	35.439	96.128	1.00
	ATOM 0.00	452	H	LEU	275	19.341	34.581	96.220	1.00
	ATOM 14.16	453	CA	LEU	275	19.322	36.539	96.946	1.00
45	ATOM 14.72	454	CB	LEU	275	17.799	36.441	97.131	1.00
	ATOM 15.26	455	CG	LEU	275	17.126	37.358	98.176	1.00
50	ATOM 14.76	456	CD1	LEU	275	17.373	38.810	97.880	1.00
	ATOM 15.40	457	CD2	LEU	275	15.642	37.071	98.223	1.00
	ATOM 14.90	458	C	LEU	275	19.957	36.461	98.300	1.00
55	ATOM 15.55	459	O	LEU	275	19.884	35.439	98.984	1.00
	ATOM 16.04	460	N	LYS	276	20.560	37.570	98.687	1.00

	ATOM	461	H	LYS	276	20.585	38.337	98.075	1.00
	0.00								
	ATOM	462	CA	LYS	276	21.161	37.698	100.008	1.00
	18.12								
5	ATOM	463	CB	LYS	276	22.041	38.935	100.022	1.00
	17.89								
	ATOM	464	CG	LYS	276	22.544	39.200	101.420	1.00
	20.43								
10	ATOM	465	CD	LYS	276	23.537	40.284	101.422	1.00
	21.32								
	ATOM	466	CE	LYS	276	24.127	40.343	102.800	1.00
	23.30								
	ATOM	467	NZ	LYS	276	25.301	41.227	102.750	1.00
	23.81								
15	ATOM	468	HZ1	LYS	276	25.023	42.181	102.440	1.00
	0.00								
	ATOM	469	HZ2	LYS	276	25.992	40.837	102.068	1.00
	0.00								
	ATOM	470	HZ3	LYS	276	25.742	41.282	103.688	1.00
20	0.00								
	ATOM	471	C	LYS	276	20.010	37.870	100.986	1.00
	18.63								
	ATOM	472	O	LYS	276	19.317	38.883	100.927	1.00
	18.34								
25	ATOM	473	N	ALA	277	19.804	36.878	101.854	1.00
	20.10								
	ATOM	474	H	ALA	277	20.411	36.106	101.843	1.00
	0.00								
	ATOM	475	CA	ALA	277	18.696	36.896	102.809	1.00
30	21.51								
	ATOM	476	CB	ALA	277	18.744	35.672	103.740	1.00
	21.27								
	ATOM	477	C	ALA	277	18.662	38.192	103.608	1.00
	21.38								
35	ATOM	478	O	ALA	277	19.689	38.632	104.114	1.00
	23.46								
	ATOM	479	N	GLY	278	17.498	38.841	103.623	1.00
	21.75								
40	ATOM	480	H	GLY	278	16.742	38.457	103.137	1.00
	0.00								
	ATOM	481	CA	GLY	278	17.335	40.098	104.345	1.00
	21.96								
	ATOM	482	C	GLY	278	17.703	41.377	103.617	1.00
	21.14								
45	ATOM	483	O	GLY	278	17.305	42.473	104.045	1.00
	22.05								
	ATOM	484	N	SER	279	18.394	41.263	102.487	1.00
	20.64								
50	ATOM	485	H	SER	279	18.644	40.372	102.161	1.00
	0.00								
	ATOM	486	CA	SER	279	18.819	42.442	101.738	1.00
	19.52								
	ATOM	487	CB	SER	279	19.972	42.078	100.785	1.00
	19.84								
55	ATOM	488	OG	SER	279	19.440	41.327	99.694	1.00
	18.98								
	ATOM	489	HG	SER	279	20.154	41.097	99.086	1.00
	0.00								

	ATOM 19.74	490	C	SER	279	17.712	43.126	100.952	1.00
	ATOM 20.02	491	O	SER	279	17.835	44.293	100.568	1.00
5	ATOM 17.85	492	N	MET	280	16.637	42.390	100.700	1.00
	ATOM 0.00	493	H	MET	280	16.594	41.465	101.047	1.00
10	ATOM 16.89	494	CA	MET	280	15.489	42.901	99.956	1.00
	ATOM 17.51	495	CB	MET	280	15.839	43.178	98.496	1.00
	ATOM 17.40	496	CG	MET	280	16.225	41.950	97.688	1.00
15	ATOM 18.85	497	SD	MET	280	16.460	42.297	95.951	1.00
	ATOM 16.54	498	CE	MET	280	14.770	42.465	95.400	1.00
20	ATOM 15.88	499	C	MET	280	14.422	41.828	100.044	1.00
	ATOM 16.00	500	O	MET	280	14.692	40.713	100.422	1.00
	ATOM 14.52	501	N	SER	281	13.194	42.197	99.739	1.00
25	ATOM 0.00	502	H	SER	281	13.024	43.121	99.473	1.00
	ATOM 14.28	503	CA	SER	281	12.100	41.271	99.799	1.00
30	ATOM 15.24	504	CB	SER	281	10.811	42.032	99.436	1.00
	ATOM 16.19	505	OG	SER	281	9.768	41.133	99.163	1.00
	ATOM 0.00	506	HG	SER	281	10.032	40.550	98.442	1.00
35	ATOM 12.89	507	C	SER	281	12.231	40.062	98.869	1.00
	ATOM 12.83	508	O	SER	281	12.536	40.225	97.691	1.00
40	ATOM 11.26	509	N	PRO	282	11.948	38.860	99.374	0.51
	ATOM 10.63	510	CD	PRO	282	11.412	38.488	100.692	0.51
	ATOM 9.61	511	CA	PRO	282	12.044	37.698	98.489	0.51
45	ATOM 9.95	512	CB	PRO	282	11.828	36.511	99.427	0.51
	ATOM 10.91	513	CG	PRO	282	11.890	37.067	100.820	0.51
50	ATOM 8.61	514	C	PRO	282	10.938	37.789	97.410	0.51
	ATOM 5.03	515	O	PRO	282	11.081	37.265	96.317	0.51
	ATOM 10.53	516	N	ASP	283	9.820	38.444	97.734	1.00
55	ATOM 0.00	517	H	ASP	283	9.710	38.821	98.636	1.00
	ATOM 11.00	518	CA	ASP	283	8.752	38.607	96.773	1.00

	ATOM	519	CB	ASP	283	7.477	39.171	97.472	1.00
	13.39								
	ATOM	520	CG	ASP	283	6.286	39.334	96.495	1.00
	16.20								
5	ATOM	521	OD1	ASP	283	5.792	38.307	95.941	1.00
	18.15								
	ATOM	522	OD2	ASP	283	5.810	40.470	96.263	1.00
	16.68								
10	ATOM	523	C	ASP	283	9.237	39.535	95.651	1.00
	10.60								
	ATOM	524	O	ASP	283	9.008	39.267	94.491	1.00
	11.89								
	ATOM	525	N	ALA	284	9.901	40.638	96.000	1.00
	12.01								
15	ATOM	526	H	ALA	284	10.073	40.837	96.948	1.00
	0.00								
	ATOM	527	CA	ALA	284	10.402	41.553	94.983	1.00
	11.82								
20	ATOM	528	CB	ALA	284	11.085	42.782	95.643	1.00
	12.76								
	ATOM	529	C	ALA	284	11.421	40.824	94.112	1.00
	11.34								
	ATOM	530	O	ALA	284	11.451	40.994	92.910	1.00
	12.67								
25	ATOM	531	N	PHE	285	12.292	40.068	94.752	1.00
	11.20								
	ATOM	532	H	PHE	285	12.230	40.005	95.726	1.00
	0.00								
30	ATOM	533	CA	PHE	285	13.324	39.315	94.027	1.00
	10.80								
	ATOM	534	CB	PHE	285	14.185	38.521	95.038	1.00
	10.15								
	ATOM	535	CG	PHE	285	15.303	37.735	94.414	1.00
	10.28								
35	ATOM	536	CD1	PHE	285	16.477	38.381	94.036	1.00
	10.36								
	ATOM	537	CD2	PHE	285	15.182	36.358	94.211	1.00
	10.04								
40	ATOM	538	CE1	PHE	285	17.557	37.626	93.439	1.00
	11.72								
	ATOM	539	CE2	PHE	285	16.240	35.612	93.622	1.00
	9.70								
	ATOM	540	CZ	PHE	285	17.408	36.252	93.244	1.00
	9.67								
45	ATOM	541	C	PHE	285	12.667	38.349	93.011	1.00
	10.63								
	ATOM	542	O	PHE	285	13.036	38.328	91.833	1.00
	11.66								
	ATOM	543	N	LEU	286	11.680	37.574	93.453	1.00
50	9.81								
	ATOM	544	H	LEU	286	11.360	37.667	94.365	1.00
	0.00								
	ATOM	545	CA	LEU	286	11.055	36.582	92.565	1.00
	11.19								
55	ATOM	546	CB	LEU	286	10.354	35.491	93.373	1.00
	11.45								
	ATOM	547	CG	LEU	286	11.324	34.522	94.080	1.00
	11.02								



	ATOM 12.70	548	CD1	LEU	286	10.594	33.757	95.126	1.00
	ATOM 10.79	549	CD2	LEU	286	12.004	33.545	93.081	1.00
5	ATOM 11.27	550	C	LEU	286	10.129	37.149	91.534	1.00
	ATOM 11.78	551	O	LEU	286	9.775	36.501	90.559	1.00
10	ATOM 11.65	552	N	ALA	287	9.690	38.381	91.767	1.00
	ATOM 0.00	553	H	ALA	287	9.917	38.858	92.592	1.00
	ATOM 11.64	554	CA	ALA	287	8.820	39.011	90.792	1.00
15	ATOM 12.67	555	CB	ALA	287	8.409	40.422	91.276	1.00
	ATOM 10.99	556	C	ALA	287	9.434	39.050	89.383	1.00
20	ATOM 10.96	557	O	ALA	287	8.716	38.900	88.365	1.00
	ATOM 10.68	558	N	GLU	288	10.765	39.146	89.327	1.00
	ATOM 0.00	559	H	GLU	288	11.299	39.193	90.148	1.00
25	ATOM 10.51	560	CA	GLU	288	11.453	39.191	88.051	1.00
	ATOM 11.55	561	CB	GLU	288	12.935	39.481	88.257	1.00
30	ATOM 13.55	562	CG	GLU	288	13.663	39.445	86.924	1.00
	ATOM 15.93	563	CD	GLU	288	15.124	39.777	87.027	1.00
	ATOM 17.97	564	OE1	GLU	288	15.689	39.843	88.151	1.00
35	ATOM 16.29	565	OE2	GLU	288	15.723	39.984	85.959	1.00
	ATOM 9.59	566	C	GLU	288	11.309	37.847	87.345	1.00
40	ATOM 9.75	567	O	GLU	288	11.052	37.767	86.153	1.00
	ATOM 9.45	568	N	ALA	289	11.496	36.774	88.104	1.00
	ATOM 0.00	569	H	ALA	289	11.702	36.863	89.059	1.00
45	ATOM 9.52	570	CA	ALA	289	11.352	35.449	87.502	1.00
	ATOM 9.44	571	CB	ALA	289	11.724	34.414	88.530	1.00
50	ATOM 9.32	572	C	ALA	289	9.905	35.216	86.997	1.00
	ATOM 9.28	573	O	ALA	289	9.695	34.740	85.884	1.00
	ATOM 11.14	574	N	ASN	290	8.912	35.647	87.780	1.00
55	ATOM 0.00	575	H	ASN	290	9.101	36.050	88.649	1.00
	ATOM 11.56	576	CA	ASN	290	7.516	35.468	87.357	1.00

5	ATOM 14.37	577	CB	ASN	290	6.569	35.952	88.466	1.00
	ATOM 17.32	578	CG	ASN	290	6.655	35.081	89.739	1.00
	ATOM 19.80	579	OD1	ASN	290	7.075	33.943	89.680	1.00
	ATOM 17.51	580	ND2	ASN	290	6.187	35.593	90.851	1.00
	ATOM 0.00	581	HD21	ASN	290	5.786	36.481	90.850	1.00
10	ATOM 0.00	582	HD22	ASN	290	6.275	35.050	91.644	1.00
	ATOM 11.86	583	C	ASN	290	7.251	36.199	86.033	1.00
	ATOM 11.62	584	O	ASN	290	6.587	35.677	85.153	1.00
15	ATOM 11.22	585	N	LEU	291	7.836	37.387	85.868	1.00
	ATOM 0.00	586	H	LEU	291	8.374	37.768	86.595	1.00
	ATOM 11.75	587	CA	LEU	291	7.656	38.133	84.625	1.00
20	ATOM 12.23	588	CB	LEU	291	8.282	39.535	84.751	1.00
	ATOM 13.03	589	CG	LEU	291	8.185	40.373	83.467	1.00
	ATOM 15.64	590	CD1	LEU	291	7.868	41.815	83.829	1.00
25	ATOM 14.61	591	CD2	LEU	291	9.504	40.288	82.637	1.00
	ATOM 11.60	592	C	LEU	291	8.309	37.393	83.472	1.00
	ATOM 11.66	593	O	LEU	291	7.775	37.337	82.375	1.00
30	ATOM 10.84	594	N	MET	292	9.492	36.843	83.729	1.00
	ATOM 0.00	595	H	MET	292	9.873	36.893	84.632	1.00
	ATOM 11.69	596	CA	MET	292	10.214	36.128	82.669	1.00
35	ATOM 10.20	597	CB	MET	292	11.631	35.762	83.112	1.00
	ATOM 10.33	598	CG	MET	292	12.483	37.020	83.427	1.00
	ATOM 10.40	599	SD	MET	292	14.091	36.510	84.073	1.00
40	ATOM 9.86	600	CE	MET	292	14.866	35.881	82.607	1.00
	ATOM 12.23	601	C	MET	292	9.475	34.907	82.156	1.00
	ATOM 13.03	602	O	MET	292	9.647	34.562	80.981	1.00
45	ATOM 13.02	603	N	LYS	293	8.584	34.350	82.985	1.00
	ATOM 0.00	604	H	LYS	293	8.486	34.720	83.884	1.00
	ATOM 15.14	605	CA	LYS	293	7.762	33.188	82.564	1.00

	ATOM 14.94	606	CB	LYS	293	6.948	32.663	83.747	1.00
	ATOM 15.08	607	CG	LYS	293	7.766	32.128	84.906	1.00
5	ATOM 17.22	608	CD	LYS	293	6.890	31.761	86.085	1.00
	ATOM 18.51	609	CE	LYS	293	7.726	31.376	87.286	1.00
10	ATOM 19.83	610	NZ	LYS	293	6.887	30.902	88.479	1.00
	ATOM 0.00	611	HZ1	LYS	293	6.333	30.066	88.185	1.00
	ATOM 0.00	612	HZ2	LYS	293	6.239	31.661	88.760	1.00
15	ATOM 0.00	613	HZ3	LYS	293	7.507	30.647	89.260	1.00
	ATOM 16.53	614	C	LYS	293	6.829	33.606	81.421	1.00
20	ATOM 17.55	615	O	LYS	293	6.545	32.823	80.534	1.00
	ATOM 18.04	616	N	GLN	294	6.420	34.875	81.424	1.00
	ATOM 0.00	617	H	GLN	294	6.719	35.469	82.143	1.00
25	ATOM 19.92	618	CA	GLN	294	5.544	35.451	80.385	1.00
	ATOM 21.19	619	CB	GLN	294	4.688	36.565	80.996	1.00
30	ATOM 23.42	620	CG	GLN	294	3.862	36.130	82.160	1.00
	ATOM 24.85	621	CD	GLN	294	3.053	34.911	81.850	1.00
	ATOM 27.15	622	OE1	GLN	294	2.605	34.705	80.711	1.00
35	ATOM 27.14	623	NE2	GLN	294	2.836	34.090	82.865	1.00
	ATOM 0.00	624	HE21	GLN	294	3.177	34.317	83.740	1.00
40	ATOM 0.00	625	HE22	GLN	294	2.292	33.291	82.678	1.00
	ATOM 19.86	626	C	GLN	294	6.235	36.049	79.174	1.00
	ATOM 21.52	627	O	GLN	294	5.586	36.469	78.184	1.00
45	ATOM 17.72	628	N	LEU	295	7.538	36.240	79.273	1.00
	ATOM 0.00	629	H	LEU	295	8.005	35.994	80.100	1.00
50	ATOM 17.44	630	CA	LEU	295	8.259	36.856	78.183	1.00
	ATOM 18.33	631	CB	LEU	295	8.899	38.174	78.633	1.00
	ATOM 19.10	632	CG	LEU	295	8.089	39.439	78.537	1.00
55	ATOM 17.86	633	CD1	LEU	295	8.952	40.578	79.056	1.00
	ATOM 18.70	634	CD2	LEU	295	7.638	39.671	77.075	1.00

	ATOM	635	C	LEU	295	9.343	35.957	77.700	1.00
	16.74								
	ATOM	636	O	LEU	295	10.523	36.204	77.934	1.00
	18.51								
5	ATOM	637	N	GLN	296	8.954	35.007	76.874	1.00
	14.87								
	ATOM	638	H	GLN	296	8.013	34.951	76.608	1.00
	0.00								
10	ATOM	639	CA	GLN	296	9.889	34.056	76.344	1.00
	13.05								
	ATOM	640	CB	GLN	296	9.391	32.620	76.593	1.00
	14.33								
	ATOM	641	CG	GLN	296	9.240	32.242	78.076	1.00
	15.73								
15	ATOM	642	CD	GLN	296	8.768	30.784	78.185	1.00
	16.79								
	ATOM	643	OE1	GLN	296	9.296	29.906	77.494	1.00
	18.93								
20	ATOM	644	NE2	GLN	296	7.762	30.529	79.014	1.00
	16.78								
	ATOM	645	HE21	GLN	296	7.353	31.246	79.528	1.00
	0.00								
	ATOM	646	HE22	GLN	296	7.461	29.594	79.074	1.00
	0.00								
25	ATOM	647	C	GLN	296	10.094	34.290	74.857	1.00
	11.48								
	ATOM	648	O	GLN	296	9.158	34.239	74.065	1.00
	12.22								
30	ATOM	649	N	HIS	297	11.349	34.490	74.452	1.00
	9.21								
	ATOM	650	H	HIS	297	12.070	34.506	75.110	1.00
	0.00								
	ATOM	651	CA	HIS	297	11.667	34.709	73.042	1.00
	7.88								
35	ATOM	652	CB	HIS	297	11.381	36.185	72.696	1.00
	7.64								
	ATOM	653	CG	HIS	297	11.478	36.523	71.250	1.00
	7.02								
40	ATOM	654	CD2	HIS	297	10.499	36.614	70.288	1.00
	6.74								
	ATOM	655	ND1	HIS	297	12.645	36.853	70.603	1.00
	8.34								
	ATOM	656	HD1	HIS	297	13.521	36.897	71.018	1.00
	0.00								
45	ATOM	657	CE1	HIS	297	12.413	37.105	69.324	1.00
	8.54								
	ATOM	658	NE2	HIS	297	11.101	36.960	69.130	1.00
	9.52								
50	ATOM	659	HE2	HIS	297	10.657	37.102	68.264	1.00
	0.00								
	ATOM	660	C	HIS	297	13.175	34.449	72.851	1.00
	7.79								
	ATOM	661	O	HIS	297	13.956	34.573	73.811	1.00
	7.26								
55	ATOM	662	N	GLN	298	13.573	34.036	71.657	1.00
	7.65								
	ATOM	663	H	GLN	298	12.903	33.866	70.970	1.00
	0.00								

	ATOM	664	CA	GLN	298	15.013	33.818	71.377	1.00
	7.64								
	ATOM	665	CB	GLN	298	15.300	33.484	69.903	1.00
	10.16								
5	ATOM	666	CG	GLN	298	14.997	32.104	69.355	1.00
	11.96								
	ATOM	667	CD	GLN	298	15.649	30.957	70.130	1.00
	8.58								
10	ATOM	668	OE1	GLN	298	14.935	30.145	70.613	1.00
	8.87								
	ATOM	669	NE2	GLN	298	17.002	30.904	70.237	1.00
	8.67								
	ATOM	670	HE21	GLN	298	17.535	31.617	69.798	1.00
	0.00								
15	ATOM	671	HE22	GLN	298	17.380	30.158	70.698	1.00
	0.00								
	ATOM	672	C	GLN	298	15.925	34.990	71.685	1.00
	7.38								
20	ATOM	673	O	GLN	298	17.099	34.823	72.012	1.00
	7.02								
	ATOM	674	N	ARG	299	15.389	36.199	71.564	1.00
	5.08								
	ATOM	675	H	ARG	299	14.460	36.275	71.341	1.00
	0.00								
25	ATOM	676	CA	ARG	299	16.191	37.381	71.783	1.00
	4.55								
	ATOM	677	CB	ARG	299	15.713	38.518	70.842	1.00
	4.18								
30	ATOM	678	CG	ARG	299	15.844	38.163	69.343	1.00
	5.31								
	ATOM	679	CD	ARG	299	17.190	38.627	68.732	1.00
	5.70								
	ATOM	680	NE	ARG	299	18.367	38.057	69.401	1.00
	4.85								
35	ATOM	681	HE	ARG	299	18.907	38.669	69.940	1.00
	0.00								
	ATOM	682	CZ	ARG	299	18.762	36.772	69.325	1.00
	5.72								
40	ATOM	683	NH1	ARG	299	18.072	35.895	68.613	1.00
	5.30								
	ATOM	684	HH11	ARG	299	17.246	36.191	68.136	1.00
	0.00								
	ATOM	685	HH12	ARG	299	18.357	34.942	68.573	1.00
	0.00								
45	ATOM	686	NH2	ARG	299	19.887	36.428	69.941	1.00
	5.26								
	ATOM	687	HH21	ARG	299	20.424	37.131	70.406	1.00
	0.00								
	ATOM	688	HH22	ARG	299	20.218	35.491	69.900	1.00
50	0.00								
	ATOM	689	C	ARG	299	16.170	37.909	73.213	1.00
	3.99								
	ATOM	690	O	ARG	299	16.721	38.978	73.459	1.00
	4.46								
55	ATOM	691	N	LEU	300	15.570	37.189	74.152	1.00
	3.70								
	ATOM	692	H	LEU	300	15.123	36.350	73.885	1.00
	0.00								

	ATOM	693	CA	LEU	300	15.532	37.609	75.547	1.00
	2.76								
	ATOM	694	CB	LEU	300	14.065	37.745	75.990	1.00
	4.76								
5	ATOM	695	CG	LEU	300	13.374	39.107	75.659	1.00
	4.91								
	ATOM	696	CD1	LEU	300	13.310	39.464	74.206	1.00
	5.95								
10	ATOM	697	CD2	LEU	300	11.966	39.016	76.303	1.00
	6.21								
	ATOM	698	C	LEU	300	16.165	36.473	76.369	1.00
	4.75								
	ATOM	699	O	LEU	300	15.872	35.298	76.102	1.00
	4.95								
15	ATOM	700	N	VAL	301	16.977	36.818	77.352	1.00
	4.59								
	ATOM	701	H	VAL	301	17.165	37.766	77.515	1.00
	0.00								
	ATOM	702	CA	VAL	301	17.610	35.808	78.204	1.00
20	5.27								
	ATOM	703	CB	VAL	301	18.486	36.503	79.257	1.00
	6.48								
	ATOM	704	CG1	VAL	301	18.941	35.466	80.295	1.00
	9.38								
25	ATOM	705	CG2	VAL	301	19.709	37.060	78.572	1.00
	7.92								
	ATOM	706	C	VAL	301	16.469	34.980	78.818	1.00
	5.74								
	ATOM	707	O	VAL	301	15.562	35.524	79.433	1.00
30	6.67								
	ATOM	708	N	ARG	302	16.551	33.666	78.661	1.00
	4.72								
	ATOM	709	H	ARG	302	17.335	33.285	78.214	1.00
	0.00								
35	ATOM	710	CA	ARG	302	15.474	32.770	79.103	1.00
	5.24								
	ATOM	711	CB	ARG	302	15.495	31.536	78.171	1.00
	6.58								
40	ATOM	712	CG	ARG	302	14.401	30.467	78.475	1.00
	8.38								
	ATOM	713	CD	ARG	302	14.573	29.236	77.581	1.00
	13.26								
	ATOM	714	NE	ARG	302	13.573	28.193	77.840	1.00
	17.18								
45	ATOM	715	HE	ARG	302	12.760	28.179	77.302	1.00
	0.00								
	ATOM	716	CZ	ARG	302	13.720	27.260	78.785	1.00
	18.72								
	ATOM	717	NH1	ARG	302	14.804	27.265	79.575	1.00
50	18.61								
	ATOM	718	HH11	ARG	302	15.491	27.975	79.465	1.00
	0.00								
	ATOM	719	HH12	ARG	302	14.899	26.571	80.282	1.00
	0.00								
55	ATOM	720	NH2	ARG	302	12.828	26.268	78.880	1.00
	20.90								
	ATOM	721	HH21	ARG	302	12.071	26.223	78.242	1.00
	0.00								

	ATOM	722	HH22	ARG	302	12.944	25.566	79.586	1.00
	0.00								
	ATOM	723	C	ARG	302	15.565	32.306	80.554	1.00
	4.86								
5	ATOM	724	O	ARG	302	16.632	31.867	81.009	1.00
	5.51								
	ATOM	725	N	LEU	303	14.441	32.352	81.265	1.00
	4.43								
10	ATOM	726	H	LEU	303	13.645	32.794	80.920	1.00
	0.00								
	ATOM	727	CA	LEU	303	14.409	31.771	82.615	1.00
	5.26								
	ATOM	728	CB	LEU	303	13.068	32.048	83.282	1.00
	5.82								
15	ATOM	729	CG	LEU	303	12.908	31.501	84.712	1.00
	6.58								
	ATOM	730	CD1	LEU	303	13.851	32.214	85.738	1.00
	6.78								
20	ATOM	731	CD2	LEU	303	11.436	31.724	85.122	1.00
	7.19								
	ATOM	732	C	LEU	303	14.513	30.233	82.472	1.00
	7.27								
	ATOM	733	O	LEU	303	13.777	29.602	81.666	1.00
	8.97								
25	ATOM	734	N	TYR	304	15.381	29.645	83.287	1.00
	7.38								
	ATOM	735	H	TYR	304	15.846	30.185	83.941	1.00
	0.00								
30	ATOM	736	CA	TYR	304	15.628	28.207	83.279	1.00
	9.20								
	ATOM	737	CB	TYR	304	17.137	28.013	83.439	1.00
	12.10								
	ATOM	738	CG	TYR	304	17.668	26.670	83.106	1.00
	16.90								
35	ATOM	739	CD1	TYR	304	17.486	25.595	83.981	1.00
	18.59								
	ATOM	740	CE1	TYR	304	17.901	24.310	83.645	1.00
	19.46								
40	ATOM	741	CD2	TYR	304	18.291	26.442	81.891	1.00
	17.15								
	ATOM	742	CE2	TYR	304	18.692	25.155	81.538	1.00
	18.38								
	ATOM	743	CZ	TYR	304	18.485	24.105	82.417	1.00
	19.88								
45	ATOM	744	OH	TYR	304	18.825	22.837	82.035	1.00
	20.68								
	ATOM	745	HH	TYR	304	19.174	22.852	81.144	1.00
	0.00								
50	ATOM	746	C	TYR	304	14.886	27.530	84.432	1.00
	8.76								
	ATOM	747	O	TYR	304	14.244	26.497	84.245	1.00
	10.19								
	ATOM	748	N	ALA	305	15.007	28.085	85.626	1.00
	7.54								
55	ATOM	749	H	ALA	305	15.518	28.913	85.713	1.00
	0.00								
	ATOM	750	CA	ALA	305	14.432	27.492	86.836	1.00
	7.28								

5	ATOM 7.36	751	CB	ALA	305	15.277	26.210	87.229	1.00
	ATOM 7.58	752	C	ALA	305	14.479	28.472	88.005	1.00
	ATOM 7.76	753	O	ALA	305	15.133	29.507	87.920	1.00
	ATOM 6.33	754	N	VAL	306	13.877	28.072	89.125	0.75
	ATOM 0.00	755	H	VAL	306	13.386	27.221	89.127	1.00
10	ATOM 6.60	756	CA	VAL	306	13.908	28.858	90.345	0.75
	ATOM 7.65	757	CB	VAL	306	12.613	29.756	90.564	0.75
	ATOM 8.43	758	CG1	VAL	306	12.500	30.825	89.493	0.75
15	ATOM 8.63	759	CG2	VAL	306	11.329	28.906	90.578	0.75
	ATOM 7.64	760	C	VAL	306	13.983	27.880	91.509	0.75
	ATOM 6.81	761	O	VAL	306	13.627	26.699	91.337	0.75
20	ATOM 9.85	762	N	VAL	307	14.564	28.341	92.605	1.00
	ATOM 0.00	763	H	VAL	307	14.951	29.233	92.585	1.00
	ATOM 11.28	764	CA	VAL	307	14.620	27.575	93.860	1.00
	ATOM 11.93	765	CB	VAL	307	16.043	27.209	94.300	1.00
30	ATOM 12.96	766	CG1	VAL	307	16.011	26.526	95.654	1.00
	ATOM 11.76	767	CG2	VAL	307	16.650	26.243	93.283	1.00
	ATOM 13.39	768	C	VAL	307	14.013	28.581	94.817	1.00
35	ATOM 12.71	769	O	VAL	307	14.649	29.603	95.136	1.00
	ATOM 15.11	770	N	THR	308	12.790	28.294	95.284	1.00
	ATOM 0.00	771	H	THR	308	12.360	27.452	95.070	1.00
40	ATOM 18.31	772	CA	THR	308	12.107	29.269	96.140	1.00
	ATOM 19.28	773	CB	THR	308	10.638	29.453	95.709	1.00
	ATOM 19.76	774	OG1	THR	308	9.966	28.193	95.726	1.00
	ATOM 0.00	775	HG1	THR	308	9.056	28.301	95.466	1.00
50	ATOM 20.08	776	CG2	THR	308	10.559	30.056	94.312	1.00
	ATOM 20.02	777	C	THR	308	12.246	29.193	97.661	1.00
	ATOM 21.39	778	O	THR	308	11.514	29.872	98.398	1.00
55	ATOM 21.32	779	N	ALA	309	13.143	28.337	98.137	1.00



	ATOM 0.00	780	H	ALA	309	13.617	27.761	97.503	1.00
	ATOM 20.86	781	CA	ALA	309	13.454	28.233	99.561	1.00
5	ATOM 21.75	782	CB	ALA	309	13.646	26.766	99.968	1.00
	ATOM 21.92	783	C	ALA	309	14.754	29.016	99.768	1.00
10	ATOM 21.32	784	O	ALA	309	15.649	28.989	98.908	1.00
	ATOM 21.30	785	N	GLU	310	14.873	29.734	100.883	1.00
	ATOM 0.00	786	H	GLU	310	14.137	29.741	101.543	1.00
15	ATOM 22.49	787	CA	GLU	310	16.090	30.529	101.126	1.00
	ATOM 23.46	788	CB	GLU	310	15.886	31.446	102.349	1.00
20	ATOM 25.11	789	CG	GLU	310	14.771	32.487	102.104	1.00
	ATOM 26.08	790	CD	GLU	310	14.451	33.374	103.292	1.00
	ATOM 27.45	791	OE1	GLU	310	14.946	33.092	104.411	1.00
25	ATOM 27.13	792	OE2	GLU	310	13.643	34.314	103.123	1.00
	ATOM 22.09	793	C	GLU	310	17.389	29.683	101.245	1.00
30	ATOM 23.35	794	O	GLU	310	17.390	28.618	101.859	1.00
	ATOM 20.88	795	N	PRO	311	18.495	30.125	100.602	1.00
	ATOM 20.86	796	CD	PRO	311	19.781	29.396	100.672	1.00
35	ATOM 20.02	797	CA	PRO	311	18.626	31.337	99.782	1.00
	ATOM 20.24	798	CB	PRO	311	20.140	31.514	99.653	1.00
40	ATOM 21.06	799	CG	PRO	311	20.638	30.083	99.618	1.00
	ATOM 18.54	800	C	PRO	311	17.991	31.101	98.417	1.00
	ATOM 18.90	801	O	PRO	311	18.334	30.173	97.705	1.00
45	ATOM 15.99	802	N	ILE	312	17.156	32.032	98.027	1.00
	ATOM 0.00	803	H	ILE	312	17.013	32.821	98.586	1.00
50	ATOM 14.13	804	CA	ILE	312	16.428	31.941	96.785	1.00
	ATOM 15.35	805	CB	ILE	312	15.357	33.048	96.802	1.00
	ATOM 15.68	806	CG2	ILE	312	14.599	33.109	95.489	1.00
55	ATOM 17.79	807	CG1	ILE	312	14.445	32.807	98.025	1.00
	ATOM 19.19	808	CD1	ILE	312	13.416	33.839	98.227	1.00

5	ATOM 11.69	809	C	ILE	312	17.317	32.084	95.575	1.00
	ATOM 11.84	810	O	ILE	312	18.233	32.918	95.556	1.00
	ATOM 9.45	811	N	TYR	313	17.095	31.223	94.585	1.00
	ATOM 0.00	812	H	TYR	313	16.400	30.545	94.679	1.00
	ATOM 8.37	813	CA	TYR	313	17.861	31.336	93.345	1.00
10	ATOM 8.55	814	CB	TYR	313	18.624	30.041	93.016	1.00
	ATOM 12.63	815	CG	TYR	313	19.756	29.586	93.920	1.00
	ATOM 12.91	816	CD1	TYR	313	20.370	30.425	94.826	1.00
15	ATOM 14.23	817	CE1	TYR	313	21.426	29.985	95.632	1.00
	ATOM 14.27	818	CD2	TYR	313	20.223	28.273	93.828	1.00
	ATOM 14.90	819	CE2	TYR	313	21.280	27.829	94.626	1.00
	ATOM 15.27	820	CZ	TYR	313	21.870	28.689	95.520	1.00
25	ATOM 17.23	821	OH	TYR	313	22.910	28.240	96.314	1.00
	ATOM 0.00	822	HH	TYR	313	23.083	27.319	96.125	1.00
	ATOM 7.36	823	C	TYR	313	16.971	31.540	92.137	1.00
30	ATOM 7.60	824	O	TYR	313	15.893	30.996	92.046	1.00
	ATOM 5.30	825	N	ILE	314	17.457	32.334	91.189	0.82
	ATOM 0.00	826	H	ILE	314	18.265	32.853	91.366	1.00
35	ATOM 5.28	827	CA	ILE	314	16.818	32.465	89.871	0.82
	ATOM 3.82	828	CB	ILE	314	16.487	33.917	89.505	0.82
	ATOM 5.97	829	CG2	ILE	314	16.118	34.031	88.022	0.82
	ATOM 6.17	830	CG1	ILE	314	15.353	34.373	90.376	0.82
45	ATOM 6.59	831	CD1	ILE	314	15.075	35.885	90.228	0.82
	ATOM 5.34	832	C	ILE	314	17.912	31.956	88.901	0.82
	ATOM 6.05	833	O	ILE	314	19.054	32.440	88.919	0.82
50	ATOM 4.96	834	N	ILE	315	17.590	30.941	88.112	1.00
	ATOM 0.00	835	H	ILE	315	16.681	30.583	88.145	1.00
	ATOM 5.21	836	CA	ILE	315	18.555	30.342	87.177	1.00
55	ATOM 6.45	837	CB	ILE	315	18.584	28.786	87.389	1.00

	ATOM	838	CG2	ILE	315	19.648	28.161	86.489	1.00
	6.91								
	ATOM	839	CG1	ILE	315	18.938	28.480	88.858	1.00
	7.39								
5	ATOM	840	CD1	ILE	315	17.755	28.248	89.842	1.00
	8.45								
	ATOM	841	C	ILE	315	18.159	30.700	85.767	1.00
	5.40								
10	ATOM	842	O	ILE	315	16.995	30.576	85.409	1.00
	4.96								
	ATOM	843	N	THR	316	19.129	31.176	84.970	1.00
	5.62								
	ATOM	844	H	THR	316	20.044	31.248	85.291	1.00
	0.00								
15	ATOM	845	CA	THR	316	18.824	31.575	83.615	1.00
	5.76								
	ATOM	846	CB	THR	316	18.829	33.131	83.474	1.00
	8.03								
	ATOM	847	OG1	THR	316	20.137	33.649	83.793	1.00
	9.42								
20	ATOM	848	HG1	THR	316	20.126	34.596	83.708	1.00
	0.00								
	ATOM	849	CG2	THR	316	17.897	33.731	84.491	1.00
	7.19								
25	ATOM	850	C	THR	316	19.792	31.052	82.580	1.00
	5.99								
	ATOM	851	O	THR	316	20.860	30.501	82.906	1.00
	5.90								
	ATOM	852	N	GLU	317	19.445	31.314	81.342	1.00
	5.22								
30	ATOM	853	H	GLU	317	18.592	31.745	81.162	1.00
	0.00								
	ATOM	854	CA	GLU	317	20.295	30.965	80.189	1.00
	5.30								
35	ATOM	855	CB	GLU	317	19.618	31.546	78.960	1.00
	5.70								
	ATOM	856	CG	GLU	317	20.307	31.327	77.643	1.00
	6.11								
	ATOM	857	CD	GLU	317	19.459	31.830	76.475	1.00
	6.55								
40	ATOM	858	OE1	GLU	317	18.499	32.609	76.703	1.00
	6.40								
	ATOM	859	OE2	GLU	317	19.715	31.435	75.323	1.00
	7.06								
45	ATOM	860	C	GLU	317	21.690	31.631	80.355	1.00
	7.29								
	ATOM	861	O	GLU	317	21.794	32.837	80.668	1.00
	8.69								
	ATOM	862	N	TYR	318	22.754	30.866	80.133	1.00
	6.02								
50	ATOM	863	H	TYR	318	22.648	29.938	79.891	1.00
	0.00								
	ATOM	864	CA	TYR	318	24.114	31.411	80.272	1.00
	5.54								
55	ATOM	865	CB	TYR	318	25.078	30.268	80.623	1.00
	6.33								
	ATOM	866	CG	TYR	318	26.452	30.764	81.010	1.00
	7.47								

	ATOM	867	CD1	TYR	318	26.643	31.354	82.258	1.00
	10.12								
	ATOM	868	CE1	TYR	318	27.862	31.866	82.636	1.00
	13.41								
5	ATOM	869	CD2	TYR	318	27.509	30.672	80.143	1.00
	9.46								
	ATOM	870	CE2	TYR	318	28.766	31.208	80.518	1.00
	11.26								
10	ATOM	871	CZ	TYR	318	28.909	31.787	81.756	1.00
	12.20								
	ATOM	872	OH	TYR	318	30.143	32.302	82.179	1.00
	16.24								
	ATOM	873	HH	TYR	318	30.059	32.690	83.047	1.00
	0.00								
15	ATOM	874	C	TYR	318	24.554	32.041	78.950	1.00
	5.01								
	ATOM	875	O	TYR	318	24.367	31.482	77.835	1.00
	5.85								
20	ATOM	876	N	MET	319	25.165	33.233	79.080	1.00
	5.48								
	ATOM	877	H	MET	319	25.292	33.625	79.961	1.00
	0.00								
	ATOM	878	CA	MET	319	25.612	33.975	77.904	1.00
	5.51								
25	ATOM	879	CB	MET	319	24.888	35.332	77.889	1.00
	6.85								
	ATOM	880	CG	MET	319	23.344	35.195	77.705	1.00
	8.12								
30	ATOM	881	SD	MET	319	22.849	34.471	76.173	1.00
	11.98								
	ATOM	882	CE	MET	319	23.062	35.837	75.041	1.00
	9.53								
	ATOM	883	C	MET	319	27.129	34.107	78.064	1.00
	5.87								
35	ATOM	884	O	MET	319	27.615	34.858	78.897	1.00
	7.09								
	ATOM	885	N	GLU	320	27.858	33.407	77.216	1.00
	6.56								
40	ATOM	886	H	GLU	320	27.431	32.956	76.453	1.00
	0.00								
	ATOM	887	CA	GLU	320	29.299	33.269	77.406	1.00
	7.66								
	ATOM	888	CB	GLU	320	29.898	32.327	76.362	1.00
	10.83								
45	ATOM	889	CG	GLU	320	31.367	31.957	76.669	1.00
	16.03								
	ATOM	890	CD	GLU	320	31.475	31.047	77.891	1.00
	19.05								
	ATOM	891	OE1	GLU	320	30.758	30.025	77.939	1.00
50	22.54								
	ATOM	892	OE2	GLU	320	32.235	31.369	78.834	1.00
	23.91								
	ATOM	893	C	GLU	320	30.115	34.513	77.416	1.00
	7.80								
55	ATOM	894	O	GLU	320	31.104	34.568	78.145	1.00
	9.31								
	ATOM	895	N	ASN	321	29.705	35.490	76.621	1.00
	6.37								

	ATOM	896	H	ASN	321	28.871	35.388	76.113	1.00
	0.00								
	ATOM	897	CA	ASN	321	30.480	36.722	76.512	1.00
	6.88								
5	ATOM	898	CB	ASN	321	30.615	37.140	75.058	1.00
	6.80								
	ATOM	899	CG	ASN	321	31.689	36.332	74.348	1.00
	8.90								
10	ATOM	900	OD1	ASN	321	32.864	36.282	74.820	1.00
	9.89								
	ATOM	901	ND2	ASN	321	31.354	35.755	73.224	1.00
	9.37								
	ATOM	902	HD21	ASN	321	30.446	35.848	72.879	1.00
	0.00								
15	ATOM	903	HD22	ASN	321	32.049	35.235	72.766	1.00
	0.00								
	ATOM	904	C	ASN	321	30.011	37.837	77.428	1.00
	6.75								
	ATOM	905	O	ASN	321	30.506	38.975	77.292	1.00
	8.29								
20	ATOM	906	N	GLY	322	29.095	37.528	78.344	1.00
	5.34								
	ATOM	907	H	GLY	322	28.692	36.642	78.339	1.00
	0.00								
25	ATOM	908	CA	GLY	322	28.722	38.495	79.367	1.00
	5.22								
	ATOM	909	C	GLY	322	28.008	39.730	78.849	1.00
	4.77								
	ATOM	910	O	GLY	322	27.372	39.690	77.799	1.00
30	6.29								
	ATOM	911	N	SER	323	28.143	40.835	79.574	0.43
	2.00								
	ATOM	912	H	SER	323	28.719	40.843	80.360	1.00
	0.00								
35	ATOM	913	CA	SER	323	27.423	42.054	79.182	0.43
	2.00								
	ATOM	914	CB	SER	323	27.333	43.044	80.361	0.43
	2.00								
	ATOM	915	OG	SER	323	26.946	42.392	81.552	0.43
40	6.27								
	ATOM	916	HG	SER	323	27.645	41.822	81.868	1.00
	0.00								
	ATOM	917	C	SER	323	28.091	42.710	77.994	0.43
	2.00								
45	ATOM	918	O	SER	323	29.304	42.734	77.877	0.43
	2.00								
	ATOM	919	N	LEU	324	27.267	43.285	77.135	1.00
	3.87								
	ATOM	920	H	LEU	324	26.301	43.285	77.318	1.00
50	0.00								
	ATOM	921	CA	LEU	324	27.726	43.918	75.930	1.00
	4.10								
	ATOM	922	CB	LEU	324	26.494	44.494	75.178	1.00
	4.53								
55	ATOM	923	CG	LEU	324	26.823	45.237	73.867	1.00
	4.60								
	ATOM	924	CD1	LEU	324	27.447	44.359	72.828	1.00
	5.61								

	ATOM	925	CD2	LEU	324	25.467	45.865	73.307	1.00
	6.42								
	ATOM	926	C	LEU	324	28.697	45.076	76.272	1.00
	5.16								
5	ATOM	927	O	LEU	324	29.666	45.282	75.511	1.00
	5.89								
	ATOM	928	N	VAL	325	28.386	45.855	77.306	1.00
	6.46								
10	ATOM	929	H	VAL	325	27.573	45.668	77.824	1.00
	0.00								
	ATOM	930	CA	VAL	325	29.240	47.000	77.669	1.00
	8.87								
	ATOM	931	CB	VAL	325	28.594	47.840	78.795	1.00
	8.19								
15	ATOM	932	CG1	VAL	325	28.717	47.195	80.138	1.00
	8.51								
	ATOM	933	CG2	VAL	325	29.247	49.268	78.848	1.00
	11.08								
20	ATOM	934	C	VAL	325	30.653	46.530	77.989	1.00
	9.20								
	ATOM	935	O	VAL	325	31.614	47.255	77.670	1.00
	11.08								
	ATOM	936	N	ASP	326	30.798	45.323	78.552	1.00
	8.70								
25	ATOM	937	H	ASP	326	30.003	44.804	78.767	1.00
	0.00								
	ATOM	938	CA	ASP	326	32.125	44.776	78.853	1.00
	8.66								
30	ATOM	939	CB	ASP	326	32.033	43.765	79.992	1.00
	11.02								
	ATOM	940	CG	ASP	326	31.631	44.377	81.309	1.00
	14.01								
	ATOM	941	OD1	ASP	326	32.006	45.532	81.614	1.00
	15.85								
35	ATOM	942	OD2	ASP	326	30.940	43.688	82.095	1.00
	16.51								
	ATOM	943	C	ASP	326	32.740	44.091	77.626	1.00
	7.60								
40	ATOM	944	O	ASP	326	33.933	44.221	77.324	1.00
	8.08								
	ATOM	945	N	PHE	327	31.911	43.400	76.853	1.00
	5.80								
	ATOM	946	H	PHE	327	30.967	43.364	77.068	1.00
	0.00								
45	ATOM	947	CA	PHE	327	32.412	42.674	75.693	1.00
	4.85								
	ATOM	948	CB	PHE	327	31.272	41.827	75.089	1.00
	4.73								
	ATOM	949	CG	PHE	327	31.670	41.144	73.836	1.00
50	7.13								
	ATOM	950	CD1	PHE	327	32.580	40.068	73.870	1.00
	6.58								
	ATOM	951	CD2	PHE	327	31.242	41.615	72.603	1.00
	6.43								
55	ATOM	952	CE1	PHE	327	33.025	39.514	72.679	1.00
	8.02								
	ATOM	953	CE2	PHE	327	31.691	41.057	71.426	1.00
	8.54								

	ATOM	954	CZ	PHE	327	32.602	39.986	71.473	1.00
	9.43								
	ATOM	955	C	PHE	327	33.044	43.581	74.630	1.00
	4.40								
5	ATOM	956	O	PHE	327	34.078	43.278	74.031	1.00
	5.80								
	ATOM	957	N	LEU	328	32.413	44.736	74.421	0.40
	2.00								
10	ATOM	958	H	LEU	328	31.613	44.967	74.941	1.00
	0.00								
	ATOM	959	CA	LEU	328	32.891	45.667	73.412	0.40
	2.00								
	ATOM	960	CB	LEU	328	31.909	46.819	73.264	0.40
	2.00								
15	ATOM	961	CG	LEU	328	30.604	46.413	72.573	0.40
	2.00								
	ATOM	962	CD1	LEU	328	29.676	47.610	72.679	0.40
	4.11								
20	ATOM	963	CD2	LEU	328	30.861	46.004	71.134	0.40
	3.16								
	ATOM	964	C	LEU	328	34.267	46.218	73.721	0.40
	2.00								
	ATOM	965	O	LEU	328	34.888	46.790	72.832	0.40
	2.00								
25	ATOM	966	N	LYS	329	34.707	46.049	74.966	1.00
	6.15								
	ATOM	967	H	LYS	329	34.127	45.597	75.611	1.00
	0.00								
30	ATOM	968	CA	LYS	329	36.042	46.538	75.410	1.00
	7.57								
	ATOM	969	CB	LYS	329	35.972	47.085	76.825	1.00
	9.39								
	ATOM	970	CG	LYS	329	35.055	48.293	76.956	1.00
	10.53								
35	ATOM	971	CD	LYS	329	35.034	48.771	78.369	1.00
	12.08								
	ATOM	972	CE	LYS	329	33.924	49.783	78.604	1.00
	14.72								
40	ATOM	973	NZ	LYS	329	33.813	50.022	80.065	1.00
	17.45								
	ATOM	974	HZ1	LYS	329	34.725	50.386	80.430	1.00
	0.00								
	ATOM	975	HZ2	LYS	329	33.609	49.124	80.554	1.00
	0.00								
45	ATOM	976	HZ3	LYS	329	33.073	50.696	80.273	1.00
	0.00								
	ATOM	977	C	LYS	329	37.121	45.460	75.332	1.00
	9.59								
50	ATOM	978	O	LYS	329	38.304	45.760	75.515	1.00
	12.01								
	ATOM	979	N	THR	330	36.727	44.203	75.186	1.00
	8.85								
	ATOM	980	H	THR	330	35.777	43.995	75.152	1.00
	0.00								
55	ATOM	981	CA	THR	330	37.733	43.124	75.084	1.00
	9.09								
	ATOM	982	CB	THR	330	37.013	41.756	75.236	1.00
	8.50								

	ATOM 9.34	983	OG1	THR	330	36.187	41.541	74.094	1.00
	ATOM 0.00	984	HG1	THR	330	35.742	40.698	74.178	1.00
5	ATOM 10.85	985	CG2	THR	330	36.275	41.705	76.534	1.00
	ATOM 8.83	986	C	THR	330	38.400	43.168	73.699	1.00
10	ATOM 8.36	987	O	THR	330	37.948	43.804	72.771	1.00
	ATOM 9.77	988	N	PRO	331	39.528	42.451	73.511	1.00
	ATOM 9.22	989	CD	PRO	331	40.331	41.767	74.521	1.00
15	ATOM 10.20	990	CA	PRO	331	40.169	42.453	72.195	1.00
	ATOM 9.14	991	CB	PRO	331	41.304	41.427	72.382	1.00
20	ATOM 8.46	992	CG	PRO	331	41.688	41.634	73.771	1.00
	ATOM 11.30	993	C	PRO	331	39.251	42.048	71.037	1.00
	ATOM 12.41	994	O	PRO	331	39.314	42.623	69.952	1.00
25	ATOM 11.84	995	N	SER	332	38.424	41.026	71.272	1.00
	ATOM 0.00	996	H	SER	332	38.455	40.584	72.144	1.00
30	ATOM 13.69	997	CA	SER	332	37.483	40.542	70.269	1.00
	ATOM 15.15	998	CB	SER	332	36.732	39.300	70.805	1.00
	ATOM 19.85	999	OG	SER	332	37.613	38.194	70.960	1.00
35	ATOM 0.00	1000	HG	SER	332	37.137	37.436	71.296	1.00
	ATOM 13.44	1001	C	SER	332	36.462	41.632	69.986	1.00
40	ATOM 14.86	1002	O	SER	332	36.191	41.946	68.825	1.00
	ATOM 11.92	1003	N	GLY	333	35.990	42.268	71.047	1.00
	ATOM 0.00	1004	H	GLY	333	36.314	42.035	71.940	1.00
45	ATOM 11.53	1005	CA	GLY	333	34.997	43.333	70.888	1.00
	ATOM 11.96	1006	C	GLY	333	35.575	44.519	70.120	1.00
50	ATOM 11.03	1007	O	GLY	333	34.911	45.094	69.240	1.00
	ATOM 11.99	1008	N	ILE	334	36.797	44.903	70.471	1.00
	ATOM 0.00	1009	H	ILE	334	37.279	44.425	71.166	1.00
55	ATOM 13.87	1010	CA	ILE	334	37.443	46.025	69.790	1.00
	ATOM 13.07	1011	CB	ILE	334	38.796	46.304	70.469	1.00



	ATOM	1012	CG2	ILE	334	39.668	47.275	69.591	1.00
	13.30								
	ATOM	1013	CG1	ILE	334	38.540	46.807	71.885	1.00
	13.93								
5	ATOM	1014	CD1	ILE	334	39.823	46.948	72.735	1.00
	16.85								
	ATOM	1015	C	ILE	334	37.616	45.791	68.283	1.00
	14.82								
10	ATOM	1016	O	ILE	334	37.479	46.715	67.484	1.00
	16.68								
	ATOM	1017	N	LYS	335	37.793	44.551	67.856	1.00
	14.68								
	ATOM	1018	H	LYS	335	37.797	43.806	68.481	1.00
	0.00								
15	ATOM	1019	CA	LYS	335	37.985	44.319	66.427	1.00
	15.73								
	ATOM	1020	CB	LYS	335	38.809	43.057	66.222	1.00
	17.96								
	ATOM	1021	CG	LYS	335	40.132	43.083	66.978	1.00
20	20.04								
	ATOM	1022	CD	LYS	335	40.829	41.736	66.884	1.00
	22.10								
	ATOM	1023	CE	LYS	335	42.093	41.738	67.703	1.00
	24.01								
25	ATOM	1024	NZ	LYS	335	42.309	40.417	68.327	1.00
	24.11								
	ATOM	1025	HZ1	LYS	335	42.361	39.679	67.590	1.00
	0.00								
	ATOM	1026	HZ2	LYS	335	41.507	40.217	68.952	1.00
30	0.00								
	ATOM	1027	HZ3	LYS	335	43.165	40.435	68.859	1.00
	0.00								
	ATOM	1028	C	LYS	335	36.698	44.249	65.595	1.00
	15.48								
35	ATOM	1029	O	LYS	335	36.747	44.062	64.372	1.00
	15.26								
	ATOM	1030	N	LEU	336	35.541	44.409	66.242	1.00
	14.77								
	ATOM	1031	H	LEU	336	35.513	44.579	67.208	1.00
40	0.00								
	ATOM	1032	CA	LEU	336	34.296	44.313	65.460	1.00
	13.70								
	ATOM	1033	CB	LEU	336	33.082	44.291	66.380	1.00
	14.27								
45	ATOM	1034	CG	LEU	336	33.028	43.099	67.363	1.00
	15.32								
	ATOM	1035	CD1	LEU	336	31.767	43.228	68.222	1.00
	15.81								
	ATOM	1036	CD2	LEU	336	33.067	41.753	66.636	1.00
50	16.91								
	ATOM	1037	C	LEU	336	34.122	45.410	64.448	1.00
	13.32								
	ATOM	1038	O	LEU	336	34.392	46.582	64.763	1.00
	15.25								
55	ATOM	1039	N	THR	337	33.599	45.033	63.280	1.00
	12.95								
	ATOM	1040	H	THR	337	33.359	44.105	63.153	1.00
	0.00								

	ATOM	1041	CA	THR	337	33.353	45.967	62.202	1.00
	11.61								
	ATOM	1042	CB	THR	337	33.161	45.237	60.836	1.00
	11.98								
5	ATOM	1043	OG1	THR	337	32.050	44.309	60.907	1.00
	12.22								
	ATOM	1044	HG1	THR	337	31.248	44.779	61.143	1.00
	0.00								
10	ATOM	1045	CG2	THR	337	34.450	44.424	60.453	1.00
	13.51								
	ATOM	1046	C	THR	337	32.064	46.729	62.483	1.00
	10.80								
	ATOM	1047	O	THR	337	31.255	46.279	63.309	1.00
	9.51								
15	ATOM	1048	N	ILE	338	31.890	47.892	61.843	1.00
	9.90								
	ATOM	1049	H	ILE	338	32.595	48.249	61.262	1.00
	0.00								
20	ATOM	1050	CA	ILE	338	30.642	48.642	62.011	1.00
	9.68								
	ATOM	1051	CB	ILE	338	30.677	50.012	61.253	1.00
	10.93								
	ATOM	1052	CG2	ILE	338	30.808	49.794	59.770	1.00
	12.49								
25	ATOM	1053	CG1	ILE	338	29.417	50.842	61.559	1.00
	12.18								
	ATOM	1054	CD1	ILE	338	29.136	51.150	63.028	1.00
	11.90								
30	ATOM	1055	C	ILE	338	29.464	47.740	61.567	1.00
	9.09								
	ATOM	1056	O	ILE	338	28.409	47.791	62.162	1.00
	9.09								
	ATOM	1057	N	ASN	339	29.659	46.905	60.551	1.00
	8.89								
35	ATOM	1058	H	ASN	339	30.527	46.858	60.092	1.00
	0.00								
	ATOM	1059	CA	ASN	339	28.595	46.012	60.093	1.00
	10.04								
40	ATOM	1060	CB	ASN	339	29.121	45.182	58.914	1.00
	14.13								
	ATOM	1061	CG	ASN	339	28.369	43.872	58.706	1.00
	19.41								
	ATOM	1062	OD1	ASN	339	27.830	43.641	57.641	1.00
	24.95								
45	ATOM	1063	ND2	ASN	339	28.340	43.013	59.728	1.00
	24.26								
	ATOM	1064	HD21	ASN	339	28.774	43.262	60.586	1.00
	0.00								
50	ATOM	1065	HD22	ASN	339	27.885	42.176	59.646	1.00
	0.00								
	ATOM	1066	C	ASN	339	28.169	45.097	61.245	1.00
	8.87								
	ATOM	1067	O	ASN	339	26.975	44.847	61.433	1.00
	7.55								
55	ATOM	1068	N	LYS	340	29.133	44.511	61.967	1.00
	7.56								
	ATOM	1069	H	LYS	340	30.077	44.690	61.773	1.00
	0.00								

	ATOM	1070	CA	LYS	340	28.726	43.588	63.029	1.00
	6.70								
	ATOM	1071	CB	LYS	340	29.915	42.776	63.573	1.00
	5.88								
5	ATOM	1072	CG	LYS	340	29.586	41.835	64.698	1.00
	6.19								
	ATOM	1073	CD	LYS	340	28.473	40.804	64.263	1.00
	6.70								
10	ATOM	1074	CE	LYS	340	28.199	39.920	65.468	1.00
	7.59								
	ATOM	1075	NZ	LYS	340	27.010	38.984	65.151	1.00
	9.23								
	ATOM	1076	HZ1	LYS	340	27.244	38.385	64.353	1.00
	0.00								
15	ATOM	1077	HZ2	LYS	340	26.167	39.561	64.935	1.00
	0.00								
	ATOM	1078	HZ3	LYS	340	26.803	38.402	65.992	1.00
	0.00								
	ATOM	1079	C	LYS	340	28.046	44.352	64.150	1.00
20	6.91								
	ATOM	1080	O	LYS	340	27.097	43.838	64.795	1.00
	7.61								
	ATOM	1081	N	LEU	341	28.526	45.576	64.420	1.00
	5.67								
25	ATOM	1082	H	LEU	341	29.266	45.945	63.925	1.00
	0.00								
	ATOM	1083	CA	LEU	341	27.903	46.378	65.460	1.00
	5.04								
	ATOM	1084	CB	LEU	341	28.692	47.686	65.712	1.00
30	6.51								
	ATOM	1085	CG	LEU	341	30.121	47.465	66.221	1.00
	7.32								
	ATOM	1086	CD1	LEU	341	30.775	48.870	66.357	1.00
	8.50								
35	ATOM	1087	CD2	LEU	341	30.140	46.820	67.570	1.00
	8.70								
	ATOM	1088	C	LEU	341	26.437	46.699	65.075	1.00
	4.38								
	ATOM	1089	O	LEU	341	25.582	46.706	65.945	1.00
40	5.27								
	ATOM	1090	N	LEU	342	26.176	46.960	63.798	1.00
	5.97								
	ATOM	1091	H	LEU	342	26.913	46.945	63.154	1.00
	0.00								
45	ATOM	1092	CA	LEU	342	24.816	47.279	63.312	1.00
	4.84								
	ATOM	1093	CB	LEU	342	24.850	47.754	61.845	1.00
	6.19								
50	ATOM	1094	CG	LEU	342	25.448	49.182	61.674	1.00
	8.40								
	ATOM	1095	CD1	LEU	342	25.731	49.410	60.184	1.00
	9.05								
	ATOM	1096	CD2	LEU	342	24.536	50.273	62.284	1.00
	10.59								
55	ATOM	1097	C	LEU	342	23.957	46.020	63.435	1.00
	6.56								
	ATOM	1098	O	LEU	342	22.808	46.088	63.844	1.00
	6.05								

	ATOM 6.36	1099	N	ASP	343	24.562	44.872	63.129	1.00
	ATOM 0.00	1100	H	ASP	343	25.477	44.873	62.804	1.00
5	ATOM 6.77	1101	CA	ASP	343	23.846	43.589	63.289	1.00
	ATOM 5.62	1102	CB	ASP	343	24.814	42.473	62.870	1.00
10	ATOM 7.43	1103	CG	ASP	343	24.355	41.091	63.252	1.00
	ATOM 8.26	1104	OD1	ASP	343	23.150	40.853	63.435	1.00
	ATOM 9.00	1105	OD2	ASP	343	25.262	40.231	63.270	1.00
15	ATOM 5.67	1106	C	ASP	343	23.417	43.439	64.747	1.00
	ATOM 6.41	1107	O	ASP	343	22.232	43.177	65.021	1.00
20	ATOM 5.54	1108	N	MET	344	24.343	43.555	65.699	1.00
	ATOM 0.00	1109	H	MET	344	25.277	43.704	65.454	1.00
	ATOM 6.12	1110	CA	MET	344	24.003	43.452	67.114	1.00
25	ATOM 8.61	1111	CB	MET	344	25.242	43.644	67.977	1.00
	ATOM 9.80	1112	CG	MET	344	26.221	42.513	67.682	1.00
30	ATOM 17.00	1113	SD	MET	344	27.833	42.796	68.536	1.00
	ATOM 16.18	1114	CE	MET	344	27.976	41.510	69.671	1.00
	ATOM 5.89	1115	C	MET	344	22.911	44.461	67.503	1.00
35	ATOM 5.58	1116	O	MET	344	22.029	44.124	68.265	1.00
	ATOM 4.96	1117	N	ALA	345	23.003	45.696	66.990	1.00
40	ATOM 0.00	1118	H	ALA	345	23.774	45.923	66.423	1.00
	ATOM 4.58	1119	CA	ALA	345	21.995	46.729	67.266	1.00
	ATOM 5.20	1120	CB	ALA	345	22.376	48.034	66.577	1.00
45	ATOM 4.22	1121	C	ALA	345	20.603	46.244	66.804	1.00
	ATOM 5.43	1122	O	ALA	345	19.646	46.454	67.563	1.00
50	ATOM 3.54	1123	N	ALA	346	20.525	45.688	65.597	1.00
	ATOM 0.00	1124	H	ALA	346	21.323	45.645	65.043	1.00
	ATOM 4.63	1125	CA	ALA	346	19.257	45.140	65.059	1.00
55	ATOM 4.56	1126	CB	ALA	346	19.442	44.694	63.647	1.00
	ATOM 4.94	1127	C	ALA	346	18.769	43.992	65.925	1.00

	ATOM	1128	O	ALA	346	17.562	43.865	66.158	1.00
	4.62								
	ATOM	1129	N	GLN	347	19.691	43.149	66.415	1.00
	4.26								
5	ATOM	1130	H	GLN	347	20.630	43.255	66.203	1.00
	0.00								
	ATOM	1131	CA	GLN	347	19.253	42.039	67.287	1.00
	4.61								
10	ATOM	1132	CB	GLN	347	20.437	41.123	67.668	1.00
	4.27								
	ATOM	1133	CG	GLN	347	21.120	40.527	66.475	1.00
	5.36								
	ATOM	1134	CD	GLN	347	22.162	39.471	66.822	1.00
	5.82								
15	ATOM	1135	OE1	GLN	347	22.130	38.918	67.891	1.00
	7.06								
	ATOM	1136	NE2	GLN	347	23.104	39.223	65.904	1.00
	6.44								
	ATOM	1137	HE21	GLN	347	23.095	39.715	65.057	1.00
	0.00								
20	ATOM	1138	HE22	GLN	347	23.763	38.532	66.098	1.00
	0.00								
	ATOM	1139	C	GLN	347	18.558	42.542	68.524	1.00
	5.59								
25	ATOM	1140	O	GLN	347	17.563	41.999	68.987	1.00
	6.38								
	ATOM	1141	N	ILE	348	19.117	43.599	69.129	1.00
	4.36								
	ATOM	1142	H	ILE	348	19.933	43.999	68.752	1.00
	0.00								
30	ATOM	1143	CA	ILE	348	18.547	44.163	70.321	1.00
	4.40								
	ATOM	1144	CB	ILE	348	19.507	45.237	70.885	1.00
	4.00								
35	ATOM	1145	CG2	ILE	348	18.896	45.944	72.083	1.00
	5.56								
	ATOM	1146	CG1	ILE	348	20.815	44.547	71.279	1.00
	3.40								
	ATOM	1147	CD1	ILE	348	21.972	45.521	71.478	1.00
	5.25								
40	ATOM	1148	C	ILE	348	17.192	44.797	69.974	1.00
	3.38								
	ATOM	1149	O	ILE	348	16.287	44.658	70.794	1.00
	4.01								
45	ATOM	1150	N	ALA	349	17.111	45.518	68.857	1.00
	4.79								
	ATOM	1151	H	ALA	349	17.902	45.617	68.285	1.00
	0.00								
	ATOM	1152	CA	ALA	349	15.827	46.147	68.447	1.00
	3.81								
50	ATOM	1153	CB	ALA	349	15.972	46.914	67.148	1.00
	4.46								
	ATOM	1154	C	ALA	349	14.788	45.007	68.242	1.00
	4.00								
55	ATOM	1155	O	ALA	349	13.606	45.193	68.604	1.00
	4.66								
	ATOM	1156	N	GLU	350	15.226	43.862	67.717	1.00
	5.02								

	ATOM	1157	H	GLU	350	16.162	43.769	67.465	1.00
	0.00								
	ATOM	1158	CA	GLU	350	14.295	42.747	67.499	1.00
	4.86								
5	ATOM	1159	CB	GLU	350	15.011	41.626	66.771	1.00
	5.41								
	ATOM	1160	CG	GLU	350	14.139	40.436	66.419	1.00
	7.13								
10	ATOM	1161	CD	GLU	350	14.948	39.349	65.710	1.00
	10.34								
	ATOM	1162	OE1	GLU	350	15.991	39.637	65.025	1.00
	10.86								
	ATOM	1163	OE2	GLU	350	14.466	38.181	65.764	1.00
	12.13								
15	ATOM	1164	C	GLU	350	13.768	42.243	68.854	1.00
	5.26								
	ATOM	1165	O	GLU	350	12.563	41.921	68.985	1.00
	5.78								
20	ATOM	1166	N	GLY	351	14.641	42.113	69.868	1.00
	3.72								
	ATOM	1167	H	GLY	351	15.593	42.271	69.705	1.00
	0.00								
	ATOM	1168	CA	GLY	351	14.167	41.705	71.183	1.00
	3.50								
25	ATOM	1169	C	GLY	351	13.200	42.739	71.741	1.00
	4.23								
	ATOM	1170	O	GLY	351	12.202	42.405	72.322	1.00
	5.58								
30	ATOM	1171	N	MET	352	13.560	44.009	71.611	1.00
	3.47								
	ATOM	1172	H	MET	352	14.420	44.241	71.190	1.00
	0.00								
	ATOM	1173	CA	MET	352	12.665	45.019	72.130	1.00
	3.42								
35	ATOM	1174	CB	MET	352	13.342	46.392	72.110	1.00
	2.72								
	ATOM	1175	CG	MET	352	14.467	46.506	73.158	1.00
	5.58								
40	ATOM	1176	SD	MET	352	14.003	46.180	74.852	1.00
	5.58								
	ATOM	1177	CE	MET	352	12.489	47.318	75.041	1.00
	7.43								
	ATOM	1178	C	MET	352	11.337	45.091	71.369	1.00
	3.73								
45	ATOM	1179	O	MET	352	10.372	45.485	72.023	1.00
	4.83								
	ATOM	1180	N	ALA	353	11.275	44.680	70.093	1.00
	4.70								
50	ATOM	1181	H	ALA	353	12.092	44.390	69.637	1.00
	0.00								
	ATOM	1182	CA	ALA	353	10.014	44.713	69.327	1.00
	3.95								
	ATOM	1183	CB	ALA	353	10.251	44.482	67.888	1.00
	5.05								
55	ATOM	1184	C	ALA	353	9.116	43.633	69.914	1.00
	5.68								
	ATOM	1185	O	ALA	353	7.888	43.816	69.920	1.00
	5.65								

	ATOM	1186	N	PHE	354	9.703	42.527	70.378	1.00
	5.57								
	ATOM	1187	H	PHE	354	10.677	42.415	70.297	1.00
	0.00								
5	ATOM	1188	CA	PHE	354	8.871	41.487	71.010	1.00
	5.74								
	ATOM	1189	CB	PHE	354	9.690	40.193	71.276	1.00
	5.64								
10	ATOM	1190	CG	PHE	354	8.963	39.190	72.137	1.00
	7.49								
	ATOM	1191	CD1	PHE	354	7.954	38.421	71.583	1.00
	9.77								
	ATOM	1192	CD2	PHE	354	9.284	39.033	73.477	1.00
	7.95								
15	ATOM	1193	CE1	PHE	354	7.269	37.494	72.416	1.00
	7.85								
	ATOM	1194	CE2	PHE	354	8.600	38.106	74.307	1.00
	10.41								
	ATOM	1195	CZ	PHE	354	7.606	37.365	73.731	1.00
20	8.21								
	ATOM	1196	C	PHE	354	8.262	42.040	72.300	1.00
	5.21								
	ATOM	1197	O	PHE	354	7.074	41.882	72.542	1.00
	6.94								
25	ATOM	1198	N	ILE	355	9.066	42.707	73.146	1.00
	3.91								
	ATOM	1199	H	ILE	355	10.007	42.832	72.897	1.00
	0.00								
	ATOM	1200	CA	ILE	355	8.624	43.274	74.422	1.00
30	4.64								
	ATOM	1201	CB	ILE	355	9.858	43.897	75.121	1.00
	4.64								
	ATOM	1202	CG2	ILE	355	9.429	44.817	76.257	1.00
	5.51								
35	ATOM	1203	CG1	ILE	355	10.689	42.748	75.698	1.00
	5.02								
	ATOM	1204	CD1	ILE	355	12.039	43.225	76.336	1.00
	5.07								
40	ATOM	1205	C	ILE	355	7.507	44.302	74.145	1.00
	5.18								
	ATOM	1206	O	ILE	355	6.471	44.277	74.821	1.00
	6.36								
	ATOM	1207	N	GLU	356	7.688	45.052	73.072	1.00
	5.48								
45	ATOM	1208	H	GLU	356	8.499	44.926	72.549	1.00
	0.00								
	ATOM	1209	CA	GLU	356	6.730	46.066	72.633	1.00
	5.56								
	ATOM	1210	CB	GLU	356	7.309	46.792	71.413	1.00
50	6.65								
	ATOM	1211	CG	GLU	356	6.392	47.776	70.567	1.00
	9.77								
	ATOM	1212	CD	GLU	356	7.256	48.348	69.382	1.00
	11.17								
55	ATOM	1213	OE1	GLU	356	7.380	47.805	68.206	1.00
	14.46								
	ATOM	1214	OE2	GLU	356	7.863	49.347	69.707	1.00
	13.36								

	ATOM	1215	C	GLU	356	5.411	45.370	72.284	1.00
	5.36								
	ATOM	1216	O	GLU	356	4.348	45.812	72.733	1.00
	6.62								
5	ATOM	1217	N	GLU	357	5.482	44.359	71.428	0.36
	2.07								
	ATOM	1218	H	GLU	357	6.356	44.046	71.111	1.00
	0.00								
10	ATOM	1219	CA	GLU	357	4.260	43.690	70.981	0.36
	2.00								
	ATOM	1220	CB	GLU	357	4.593	42.734	69.845	0.36
	3.32								
	ATOM	1221	CG	GLU	357	3.419	41.918	69.332	0.36
	6.37								
15	ATOM	1222	CD	GLU	357	3.244	40.629	70.091	0.36
	9.12								
	ATOM	1223	OE1	GLU	357	4.082	40.326	70.953	0.36
	10.81								
20	ATOM	1224	OE2	GLU	357	2.264	39.897	69.841	0.36
	12.28								
	ATOM	1225	C	GLU	357	3.495	43.010	72.096	0.36
	2.09								
	ATOM	1226	O	GLU	357	2.254	42.897	72.064	0.36
	2.00								
25	ATOM	1227	N	ARG	358	4.215	42.578	73.112	1.00
	5.24								
	ATOM	1228	H	ARG	358	5.184	42.724	73.114	1.00
	0.00								
30	ATOM	1229	CA	ARG	358	3.568	41.888	74.246	1.00
	6.65								
	ATOM	1230	CB	ARG	358	4.542	40.861	74.891	1.00
	9.04								
	ATOM	1231	CG	ARG	358	5.014	39.746	73.965	1.00
	10.38								
35	ATOM	1232	CD	ARG	358	3.832	38.910	73.377	1.00
	13.95								
	ATOM	1233	NE	ARG	358	2.952	38.513	74.438	1.00
	17.47								
40	ATOM	1234	HE	ARG	358	3.314	38.471	75.342	1.00
	0.00								
	ATOM	1235	CZ	ARG	358	1.678	38.213	74.227	1.00
	17.45								
	ATOM	1236	NH1	ARG	358	1.200	38.277	72.985	1.00
	19.34								
45	ATOM	1237	HH11	ARG	358	1.801	38.543	72.242	1.00
	0.00								
	ATOM	1238	HH12	ARG	358	0.241	38.050	72.811	1.00
	0.00								
	ATOM	1239	NH2	ARG	358	0.897	37.937	75.262	1.00
50	19.28								
	ATOM	1240	HH21	ARG	358	1.289	37.929	76.190	1.00
	0.00								
	ATOM	1241	HH22	ARG	358	-0.055	37.691	75.122	1.00
	0.00								
55	ATOM	1242	C	ARG	358	3.040	42.803	75.341	1.00
	6.80								
	ATOM	1243	O	ARG	358	2.581	42.352	76.383	1.00
	9.44								



	ATOM	1244	N	ASN	359	3.113	44.120	75.095	1.00
	7.42								
	ATOM	1245	H	ASN	359	3.472	44.423	74.234	1.00
	0.00								
5	ATOM	1246	CA	ASN	359	2.661	45.128	76.047	1.00
	8.33								
	ATOM	1247	CB	ASN	359	1.161	44.997	76.418	1.00
	8.38								
10	ATOM	1248	CG	ASN	359	0.249	45.452	75.301	1.00
	9.65								
	ATOM	1249	OD1	ASN	359	0.661	46.058	74.325	1.00
	12.69								
	ATOM	1250	ND2	ASN	359	-1.031	45.100	75.428	1.00
	12.89								
15	ATOM	1251	HD21	ASN	359	-1.325	44.590	76.209	1.00
	0.00								
	ATOM	1252	HD22	ASN	359	-1.663	45.395	74.733	1.00
	0.00								
20	ATOM	1253	C	ASN	359	3.477	45.300	77.298	1.00
	7.53								
	ATOM	1254	O	ASN	359	2.976	45.618	78.353	1.00
	9.21								
	ATOM	1255	N	TYR	360	4.786	45.023	77.207	1.00
	6.45								
25	ATOM	1256	H	TYR	360	5.185	44.692	76.374	1.00
	0.00								
	ATOM	1257	CA	TYR	360	5.629	45.247	78.357	1.00
	6.51								
30	ATOM	1258	CB	TYR	360	6.540	44.026	78.603	1.00
	6.47								
	ATOM	1259	CG	TYR	360	5.822	42.905	79.323	1.00
	7.71								
	ATOM	1260	CD1	TYR	360	5.025	42.040	78.627	1.00
	11.10								
35	ATOM	1261	CE1	TYR	360	4.362	40.971	79.293	1.00
	12.54								
	ATOM	1262	CD2	TYR	360	5.976	42.726	80.686	1.00
	9.28								
40	ATOM	1263	CE2	TYR	360	5.314	41.706	81.359	1.00
	11.47								
	ATOM	1264	CZ	TYR	360	4.526	40.842	80.651	1.00
	13.14								
	ATOM	1265	OH	TYR	360	3.793	39.868	81.329	1.00
	16.50								
45	ATOM	1266	HH	TYR	360	3.298	39.348	80.701	1.00
	0.00								
	ATOM	1267	C	TYR	360	6.552	46.413	78.061	1.00
	5.30								
50	ATOM	1268	O	TYR	360	6.622	46.880	76.936	1.00
	6.46								
	ATOM	1269	N	ILE	361	7.170	46.882	79.125	1.00
	6.46								
	ATOM	1270	H	ILE	361	6.925	46.527	80.001	1.00
	0.00								
55	ATOM	1271	CA	ILE	361	8.234	47.889	79.038	1.00
	6.30								
	ATOM	1272	CB	ILE	361	7.795	49.281	79.548	1.00
	7.47								

5	ATOM 8.36	1273	CG2	ILE	361	6.822	49.866	78.557	1.00
	ATOM 7.63	1274	CG1	ILE	361	7.283	49.192	80.974	1.00
	ATOM 10.24	1275	CD1	ILE	361	7.029	50.595	81.537	1.00
	ATOM 6.54	1276	C	ILE	361	9.397	47.292	79.854	1.00
10	ATOM 6.53	1277	O	ILE	361	9.207	46.473	80.761	1.00
	ATOM 6.73	1278	N	HIS	362	10.621	47.761	79.567	1.00
	ATOM 0.00	1279	H	HIS	362	10.705	48.454	78.895	1.00
	ATOM 6.25	1280	CA	HIS	362	11.806	47.232	80.245	1.00
15	ATOM 5.77	1281	CB	HIS	362	12.869	46.961	79.178	1.00
	ATOM 5.45	1282	CG	HIS	362	14.092	46.248	79.690	1.00
	ATOM 6.09	1283	CD2	HIS	362	14.468	44.938	79.647	1.00
	ATOM 6.86	1284	ND1	HIS	362	15.077	46.892	80.397	1.00
20	ATOM 0.00	1285	HD1	HIS	362	15.110	47.858	80.570	1.00
	ATOM 7.28	1286	CE1	HIS	362	16.014	46.030	80.777	1.00
	ATOM 6.66	1287	NE2	HIS	362	15.650	44.829	80.321	1.00
	ATOM 0.00	1288	HE2	HIS	362	16.165	44.014	80.467	1.00
25	ATOM 6.96	1289	C	HIS	362	12.312	48.198	81.333	1.00
	ATOM 7.16	1290	O	HIS	362	12.604	47.804	82.445	1.00
	ATOM 7.28	1291	N	ARG	363	12.455	49.470	80.951	1.00
	ATOM 0.00	1292	H	ARG	363	12.263	49.705	80.018	1.00
30	ATOM 7.20	1293	CA	ARG	363	12.869	50.559	81.843	1.00
	ATOM 7.60	1294	CB	ARG	363	12.013	50.655	83.133	1.00
	ATOM 7.72	1295	CG	ARG	363	10.522	50.776	82.802	1.00
	ATOM 9.74	1296	CD	ARG	363	9.783	51.262	84.036	1.00
35	ATOM 10.57	1297	NE	ARG	363	9.869	50.343	85.152	1.00
	ATOM 0.00	1298	HE	ARG	363	10.012	49.404	84.937	1.00
	ATOM 12.41	1299	CZ	ARG	363	9.750	50.683	86.428	1.00
	ATOM 13.78	1300	NH1	ARG	363	9.556	51.955	86.773	1.00
40	ATOM 0.00	1301	HH11	ARG	363	9.518	52.662	86.073	1.00

	ATOM 0.00	1302	HH12	ARG	363	9.488	52.195	87.740	1.00
	ATOM 12.55	1303	NH2	ARG	363	9.784	49.752	87.368	1.00
5	ATOM 0.00	1304	HH21	ARG	363	9.877	48.784	87.114	1.00
	ATOM 0.00	1305	HH22	ARG	363	9.691	50.004	88.328	1.00
10	ATOM 8.08	1306	C	ARG	363	14.314	50.619	82.248	1.00
	ATOM 10.09	1307	O	ARG	363	14.715	51.571	82.927	1.00
	ATOM 7.43	1308	N	ASP	364	15.106	49.633	81.845	1.00
15	ATOM 0.00	1309	H	ASP	364	14.739	48.926	81.296	1.00
	ATOM 7.37	1310	CA	ASP	364	16.538	49.612	82.217	1.00
20	ATOM 9.33	1311	CB	ASP	364	16.718	48.600	83.369	1.00
	ATOM 11.01	1312	CG	ASP	364	17.934	48.885	84.252	1.00
	ATOM 14.23	1313	OD1	ASP	364	18.666	49.855	83.985	1.00
25	ATOM 13.15	1314	OD2	ASP	364	18.133	48.118	85.232	1.00
	ATOM 7.00	1315	C	ASP	364	17.328	49.176	80.979	1.00
30	ATOM 6.90	1316	O	ASP	364	18.325	48.457	81.081	1.00
	ATOM 6.16	1317	N	LEU	365	16.969	49.704	79.816	1.00
	ATOM 0.00	1318	H	LEU	365	16.252	50.366	79.771	1.00
35	ATOM 5.80	1319	CA	LEU	365	17.626	49.321	78.591	1.00
	ATOM 6.34	1320	CB	LEU	365	16.679	49.555	77.398	1.00
40	ATOM 5.69	1321	CG	LEU	365	17.204	49.239	75.995	1.00
	ATOM 7.46	1322	CD1	LEU	365	17.619	47.750	75.912	1.00
	ATOM 7.06	1323	CD2	LEU	365	16.103	49.465	75.001	1.00
45	ATOM 7.96	1324	C	LEU	365	18.919	50.133	78.461	1.00
	ATOM 8.00	1325	O	LEU	365	18.889	51.344	78.362	1.00
50	ATOM 6.41	1326	N	ARG	366	20.036	49.436	78.454	1.00
	ATOM 0.00	1327	H	ARG	366	19.967	48.457	78.536	1.00
	ATOM 6.06	1328	CA	ARG	366	21.379	50.010	78.340	1.00
55	ATOM 6.83	1329	CB	ARG	366	21.798	50.631	79.664	1.00
	ATOM 7.28	1330	CG	ARG	366	21.724	49.671	80.885	1.00

	ATOM	1331	CD	ARG	366	21.899	50.431	82.169	1.00
	11.03								
	ATOM	1332	NE	ARG	366	23.175	51.133	82.201	1.00
	13.50								
5	ATOM	1333	HE	ARG	366	23.818	50.985	81.487	1.00
	0.00								
	ATOM	1334	CZ	ARG	366	23.495	51.973	83.177	1.00
	15.04								
10	ATOM	1335	NH1	ARG	366	22.631	52.211	84.154	1.00
	18.15								
	ATOM	1336	HH11	ARG	366	21.732	51.761	84.155	1.00
	0.00								
	ATOM	1337	HH12	ARG	366	22.860	52.847	84.888	1.00
	0.00								
15	ATOM	1338	NH2	ARG	366	24.710	52.474	83.242	1.00
	17.55								
	ATOM	1339	HH21	ARG	366	25.390	52.220	82.560	1.00
	0.00								
	ATOM	1340	HH22	ARG	366	24.954	53.114	83.978	1.00
20	0.00								
	ATOM	1341	C	ARG	366	22.302	48.866	77.977	1.00
	6.86								
	ATOM	1342	O	ARG	366	21.964	47.715	78.218	1.00
	5.81								
25	ATOM	1343	N	ALA	367	23.515	49.174	77.533	1.00
	5.91								
	ATOM	1344	H	ALA	367	23.776	50.100	77.473	1.00
	0.00								
	ATOM	1345	CA	ALA	367	24.423	48.087	77.137	1.00
30	5.11								
	ATOM	1346	CB	ALA	367	25.693	48.656	76.461	1.00
	6.19								
	ATOM	1347	C	ALA	367	24.811	47.137	78.280	1.00
	6.35								
35	ATOM	1348	O	ALA	367	25.139	45.947	77.977	1.00
	6.18								
	ATOM	1349	N	ALA	368	24.795	47.612	79.518	1.00
	6.36								
	ATOM	1350	H	ALA	368	24.592	48.543	79.680	1.00
40	0.00								
	ATOM	1351	CA	ALA	368	25.095	46.734	80.647	1.00
	6.76								
	ATOM	1352	CB	ALA	368	25.129	47.490	81.939	1.00
	8.33								
45	ATOM	1353	C	ALA	368	24.060	45.615	80.760	1.00
	6.98								
	ATOM	1354	O	ALA	368	24.355	44.580	81.356	1.00
	8.43								
	ATOM	1355	N	ASN	369	22.879	45.839	80.193	1.00
50	5.80								
	ATOM	1356	H	ASN	369	22.723	46.674	79.700	1.00
	0.00								
	ATOM	1357	CA	ASN	369	21.773	44.877	80.321	1.00
	6.07								
55	ATOM	1358	CB	ASN	369	20.528	45.545	80.911	1.00
	6.03								
	ATOM	1359	CG	ASN	369	20.736	45.949	82.373	1.00
	7.00								

	ATOM	1360	OD1	ASN	369	21.510	45.292	83.117	1.00
	8.89								
	ATOM	1361	ND2	ASN	369	20.100	47.037	82.798	1.00
	8.55								
5	ATOM	1362	HD21	ASN	369	19.516	47.524	82.189	1.00
	0.00								
	ATOM	1363	HD22	ASN	369	20.220	47.286	83.732	1.00
	0.00								
10	ATOM	1364	C	ASN	369	21.465	44.127	79.063	1.00
	6.64								
	ATOM	1365	O	ASN	369	20.369	43.601	78.878	1.00
	6.61								
	ATOM	1366	N	ILE	370	22.437	44.098	78.181	1.00
	4.83								
15	ATOM	1367	H	ILE	370	23.235	44.632	78.335	1.00
	0.00								
	ATOM	1368	CA	ILE	370	22.369	43.243	76.985	1.00
	4.37								
	ATOM	1369	CB	ILE	370	22.705	44.012	75.724	1.00
	4.38								
20	ATOM	1370	CG2	ILE	370	22.787	43.118	74.492	1.00
	5.49								
	ATOM	1371	CG1	ILE	370	21.745	45.198	75.560	1.00
	4.73								
25	ATOM	1372	CD1	ILE	370	20.210	44.713	75.543	1.00
	6.97								
	ATOM	1373	C	ILE	370	23.478	42.202	77.193	1.00
	5.68								
	ATOM	1374	O	ILE	370	24.572	42.529	77.592	1.00
	6.20								
30	ATOM	1375	N	LEU	371	23.127	40.935	77.039	1.00
	4.58								
	ATOM	1376	H	LEU	371	22.204	40.693	76.821	1.00
	0.00								
35	ATOM	1377	CA	LEU	371	24.146	39.864	77.181	1.00
	4.32								
	ATOM	1378	CB	LEU	371	23.603	38.761	78.096	1.00
	3.54								
	ATOM	1379	CG	LEU	371	23.482	39.116	79.561	1.00
	4.30								
40	ATOM	1380	CD1	LEU	371	22.880	38.001	80.367	1.00
	6.65								
	ATOM	1381	CD2	LEU	371	24.898	39.456	80.168	1.00
	7.93								
45	ATOM	1382	C	LEU	371	24.527	39.331	75.804	1.00
	4.99								
	ATOM	1383	O	LEU	371	23.742	39.345	74.833	1.00
	5.49								
	ATOM	1384	N	VAL	372	25.789	38.862	75.674	1.00
	4.04								
50	ATOM	1385	H	VAL	372	26.390	38.858	76.440	1.00
	0.00								
	ATOM	1386	CA	VAL	372	26.310	38.403	74.401	1.00
	4.69								
55	ATOM	1387	CB	VAL	372	27.623	39.164	74.085	1.00
	5.67								
	ATOM	1388	CG1	VAL	372	28.146	38.812	72.722	1.00
	6.43								

	ATOM	1389	CG2	VAL	372	27.347	40.736	74.166	1.00
	6.52								
	ATOM	1390	C	VAL	372	26.665	36.905	74.473	1.00
	4.28								
5	ATOM	1391	O	VAL	372	27.315	36.495	75.428	1.00
	5.15								
	ATOM	1392	N	SER	373	26.214	36.144	73.480	1.00
	4.34								
10	ATOM	1393	H	SER	373	25.728	36.553	72.741	1.00
	0.00								
	ATOM	1394	CA	SER	373	26.464	34.684	73.459	1.00
	4.40								
	ATOM	1395	CB	SER	373	25.410	33.992	72.594	1.00
	3.61								
15	ATOM	1396	OG	SER	373	25.671	34.220	71.244	1.00
	5.61								
	ATOM	1397	HG	SER	373	26.531	33.882	71.018	1.00
	0.00								
	ATOM	1398	C	SER	373	27.827	34.351	72.900	1.00
	6.57								
20	ATOM	1399	O	SER	373	28.541	35.199	72.374	1.00
	5.65								
	ATOM	1400	N	ASP	374	28.158	33.063	72.982	1.00
	7.67								
25	ATOM	1401	H	ASP	374	27.582	32.419	73.420	1.00
	0.00								
	ATOM	1402	CA	ASP	374	29.401	32.633	72.405	1.00
	9.72								
30	ATOM	1403	CB	ASP	374	29.630	31.168	72.747	1.00
	12.24								
	ATOM	1404	CG	ASP	374	28.651	30.288	72.094	1.00
	16.64								
	ATOM	1405	OD1	ASP	374	27.446	30.542	72.290	1.00
	18.67								
35	ATOM	1406	OD2	ASP	374	29.066	29.426	71.278	1.00
	20.28								
	ATOM	1407	C	ASP	374	29.476	32.827	70.891	1.00
	9.29								
40	ATOM	1408	O	ASP	374	30.554	32.831	70.344	1.00
	11.15								
	ATOM	1409	N	THR	375	28.327	32.927	70.190	1.00
	8.21								
	ATOM	1410	H	THR	375	27.459	32.875	70.657	1.00
	0.00								
45	ATOM	1411	CA	THR	375	28.306	33.120	68.755	1.00
	8.40								
	ATOM	1412	CB	THR	375	27.238	32.260	68.056	1.00
	8.35								
50	ATOM	1413	OG1	THR	375	25.982	32.561	68.672	1.00
	9.12								
	ATOM	1414	HG1	THR	375	25.806	33.510	68.563	1.00
	0.00								
	ATOM	1415	CG2	THR	375	27.485	30.719	68.176	1.00
	11.28								
55	ATOM	1416	C	THR	375	28.106	34.578	68.355	1.00
	8.49								
	ATOM	1417	O	THR	375	27.811	34.903	67.226	1.00
	8.72								

	ATOM 7.19	1418	N	LEU	376	28.203	35.436	69.353	1.00
	ATOM 0.00	1419	H	LEU	376	28.346	35.101	70.256	1.00
5	ATOM 8.14	1420	CA	LEU	376	28.118	36.883	69.173	1.00
	ATOM 10.40	1421	CB	LEU	376	29.149	37.407	68.161	1.00
10	ATOM 11.93	1422	CG	LEU	376	30.608	37.097	68.564	1.00
	ATOM 13.62	1423	CD1	LEU	376	31.457	38.031	67.671	1.00
	ATOM 13.34	1424	CD2	LEU	376	30.949	37.256	70.019	1.00
15	ATOM 8.14	1425	C	LEU	376	26.710	37.342	68.841	1.00
	ATOM 8.33	1426	O	LEU	376	26.502	38.204	67.976	1.00
20	ATOM 6.49	1427	N	SER	377	25.742	36.609	69.371	1.00
	ATOM 0.00	1428	H	SER	377	25.946	35.806	69.878	1.00
	ATOM 6.46	1429	CA	SER	377	24.356	37.087	69.250	1.00
25	ATOM 5.34	1430	CB	SER	377	23.400	35.934	68.923	1.00
	ATOM 6.98	1431	OG	SER	377	23.368	34.975	69.963	1.00
30	ATOM 0.00	1432	HG	SER	377	22.769	34.262	69.738	1.00
	ATOM 5.46	1433	C	SER	377	24.012	37.791	70.588	1.00
	ATOM 6.09	1434	O	SER	377	24.592	37.566	71.649	1.00
35	ATOM 5.11	1435	N	CYS	378	23.032	38.684	70.544	1.00
	ATOM 0.00	1436	H	CYS	378	22.529	38.848	69.724	1.00
40	ATOM 6.25	1437	CA	CYS	378	22.730	39.470	71.742	1.00
	ATOM 6.45	1438	CB	CYS	378	22.741	40.969	71.406	1.00
	ATOM 10.06	1439	SG	CYS	378	24.415	41.584	70.930	1.00
45	ATOM 5.48	1440	C	CYS	378	21.323	39.216	72.223	1.00
	ATOM 5.39	1441	O	CYS	378	20.443	38.963	71.396	1.00
50	ATOM 4.43	1442	N	LYS	379	21.131	39.294	73.532	1.00
	ATOM 0.00	1443	H	LYS	379	21.897	39.485	74.116	1.00
	ATOM 4.63	1444	CA	LYS	379	19.808	39.073	74.131	1.00
55	ATOM 4.64	1445	CB	LYS	379	19.695	37.664	74.777	1.00
	ATOM 4.87	1446	CG	LYS	379	19.810	36.618	73.678	1.00

	ATOM	1447	CD	LYS	379	19.503	35.253	74.181	1.00
	3.55								
	ATOM	1448	CE	LYS	379	19.881	34.280	73.053	1.00
	4.66								
5	ATOM	1449	NZ	LYS	379	19.074	32.964	73.127	1.00
	6.09								
	ATOM	1450	HZ1	LYS	379	18.062	33.166	73.034	1.00
	0.00								
10	ATOM	1451	HZ2	LYS	379	19.248	32.493	74.028	1.00
	0.00								
	ATOM	1452	HZ3	LYS	379	19.372	32.341	72.353	1.00
	0.00								
	ATOM	1453	C	LYS	379	19.553	40.113	75.210	1.00
	4.75								
15	ATOM	1454	O	LYS	379	20.444	40.544	75.950	1.00
	5.82								
	ATOM	1455	N	ILE	380	18.281	40.504	75.338	1.00
	3.76								
20	ATOM	1456	H	ILE	380	17.617	40.153	74.718	1.00
	0.00								
	ATOM	1457	CA	ILE	380	17.902	41.447	76.392	1.00
	3.92								
	ATOM	1458	CB	ILE	380	16.439	41.933	76.175	1.00
	5.30								
25	ATOM	1459	CG2	ILE	380	16.075	42.984	77.249	1.00
	5.03								
	ATOM	1460	CG1	ILE	380	16.168	42.431	74.744	1.00
	8.04								
30	ATOM	1461	CD1	ILE	380	16.997	43.587	74.311	1.00
	9.70								
	ATOM	1462	C	ILE	380	17.922	40.709	77.742	1.00
	4.94								
	ATOM	1463	O	ILE	380	17.397	39.599	77.876	1.00
	4.49								
35	ATOM	1464	N	ALA	381	18.455	41.367	78.752	1.00
	5.27								
	ATOM	1465	H	ALA	381	18.807	42.267	78.607	1.00
	0.00								
40	ATOM	1466	CA	ALA	381	18.528	40.803	80.077	1.00
	5.60								
	ATOM	1467	CB	ALA	381	20.023	40.357	80.356	1.00
	6.73								
	ATOM	1468	C	ALA	381	18.070	41.818	81.146	1.00
	7.05								
45	ATOM	1469	O	ALA	381	17.737	42.961	80.815	1.00
	6.78								
	ATOM	1470	N	ASP	382	18.087	41.372	82.394	1.00
	7.75								
50	ATOM	1471	H	ASP	382	18.342	40.442	82.530	1.00
	0.00								
	ATOM	1472	CA	ASP	382	17.763	42.160	83.573	1.00
	8.33								
	ATOM	1473	CB	ASP	382	18.797	43.262	83.852	1.00
	10.89								
55	ATOM	1474	CG	ASP	382	18.620	43.868	85.256	1.00
	14.13								
	ATOM	1475	OD1	ASP	382	17.585	43.590	85.944	1.00
	17.05								



	ATOM	1476	OD2	ASP	382	19.563	44.563	85.725	1.00
	17.44								
	ATOM	1477	C	ASP	382	16.365	42.738	83.523	1.00
	8.68								
5	ATOM	1478	O	ASP	382	16.140	43.927	83.251	1.00
	9.78								
	ATOM	1479	N	PHE	383	15.419	41.900	83.924	1.00
	7.70								
10	ATOM	1480	H	PHE	383	15.675	41.030	84.282	1.00
	0.00								
	ATOM	1481	CA	PHE	383	14.015	42.275	83.884	1.00
	8.11								
	ATOM	1482	CB	PHE	383	13.235	41.053	83.392	1.00
	7.97								
15	ATOM	1483	CG	PHE	383	13.575	40.669	81.982	1.00
	7.04								
	ATOM	1484	CD1	PHE	383	13.019	41.341	80.899	1.00
	6.87								
20	ATOM	1485	CD2	PHE	383	14.543	39.678	81.727	1.00
	5.96								
	ATOM	1486	CE1	PHE	383	13.419	41.040	79.600	1.00
	5.83								
	ATOM	1487	CE2	PHE	383	14.933	39.388	80.430	1.00
	6.87								
25	ATOM	1488	CZ	PHE	383	14.397	40.045	79.374	1.00
	6.24								
	ATOM	1489	C	PHE	383	13.457	42.771	85.216	1.00
	8.69								
30	ATOM	1490	O	PHE	383	12.227	42.854	85.411	1.00
	9.48								
	ATOM	1491	N	GLY	384	14.344	43.214	86.096	1.00
	9.32								
	ATOM	1492	H	GLY	384	15.292	43.213	85.846	1.00
	0.00								
35	ATOM	1493	CA	GLY	384	13.932	43.659	87.416	1.00
	10.41								
	ATOM	1494	C	GLY	384	12.963	44.838	87.414	1.00
	10.19								
40	ATOM	1495	O	GLY	384	12.117	44.945	88.313	1.00
	11.74								
	ATOM	1496	N	LEU	385	13.146	45.758	86.469	1.00
	9.00								
	ATOM	1497	H	LEU	385	13.886	45.663	85.830	1.00
	0.00								
45	ATOM	1498	CA	LEU	385	12.259	46.925	86.389	1.00
	9.26								
	ATOM	1499	CB	LEU	385	13.066	48.198	86.104	1.00
	9.63								
	ATOM	1500	CG	LEU	385	13.971	48.641	87.249	1.00
50	12.22								
	ATOM	1501	CD1	LEU	385	14.819	49.840	86.744	1.00
	12.81								
	ATOM	1502	CD2	LEU	385	13.169	48.985	88.509	1.00
	13.55								
55	ATOM	1503	C	LEU	385	11.197	46.759	85.349	1.00
	8.64								
	ATOM	1504	O	LEU	385	10.364	47.645	85.173	1.00
	8.68								

	ATOM	1505	N	ALA	386	11.185	45.634	84.630	1.00
	7.47								
	ATOM	1506	H	ALA	386	11.848	44.929	84.838	1.00
	0.00								
5	ATOM	1507	CA	ALA	386	10.194	45.436	83.547	1.00
	7.81								
	ATOM	1508	CB	ALA	386	10.579	44.228	82.723	1.00
	8.06								
10	ATOM	1509	C	ALA	386	8.783	45.304	84.065	1.00
	8.67								
	ATOM	1510	O	ALA	386	8.597	44.840	85.166	1.00
	9.09								
	ATOM	1511	N	ARG	387	7.810	45.773	83.293	1.00
	9.55								
15	ATOM	1512	H	ARG	387	8.034	46.133	82.404	1.00
	0.00								
	ATOM	1513	CA	ARG	387	6.411	45.761	83.739	1.00
	10.38								
20	ATOM	1514	CB	ARG	387	6.041	47.127	84.382	1.00
	9.95								
	ATOM	1515	CG	ARG	387	6.877	47.550	85.627	1.00
	11.72								
	ATOM	1516	CD	ARG	387	6.626	46.683	86.843	1.00
	11.98								
25	ATOM	1517	NE	ARG	387	7.333	47.168	88.009	1.00
	14.30								
	ATOM	1518	HE	ARG	387	6.881	47.843	88.543	1.00
	0.00								
30	ATOM	1519	CZ	ARG	387	8.535	46.731	88.390	1.00
	14.48								
	ATOM	1520	NH1	ARG	387	9.165	45.782	87.704	1.00
	14.82								
	ATOM	1521	HH11	ARG	387	8.741	45.377	86.898	1.00
	0.00								
35	ATOM	1522	HH12	ARG	387	10.064	45.463	88.010	1.00
	0.00								
	ATOM	1523	NH2	ARG	387	9.116	47.251	89.453	1.00
	16.13								
40	ATOM	1524	HH21	ARG	387	8.645	47.969	89.975	1.00
	0.00								
	ATOM	1525	HH22	ARG	387	10.012	46.930	89.752	1.00
	0.00								
	ATOM	1526	C	ARG	387	5.445	45.555	82.610	1.00
	10.77								
45	ATOM	1527	O	ARG	387	5.695	45.985	81.481	1.00
	9.38								
	ATOM	1528	N	LEU	388	4.321	44.886	82.942	1.00
	12.31								
50	ATOM	1529	H	LEU	388	4.214	44.547	83.854	1.00
	0.00								
	ATOM	1530	CA	LEU	388	3.233	44.681	82.000	1.00
	15.61								
	ATOM	1531	CB	LEU	388	2.312	43.523	82.428	1.00
	16.22								
55	ATOM	1532	CG	LEU	388	1.164	43.180	81.444	1.00
	16.99								
	ATOM	1533	CD1	LEU	388	1.624	43.029	80.043	1.00
	17.93								

	ATOM	1534	CD2	LEU	388	0.454	41.881	81.908	1.00
	19.04								
	ATOM	1535	C	LEU	388	2.444	45.977	82.079	1.00
	17.76								
5	ATOM	1536	O	LEU	388	2.023	46.406	83.162	1.00
	18.30								
	ATOM	1537	N	ILE	389	2.211	46.542	80.910	1.00
	19.03								
10	ATOM	1538	H	ILE	389	2.498	46.080	80.106	1.00
	0.00								
	ATOM	1539	CA	ILE	389	1.544	47.815	80.736	1.00
	22.41								
	ATOM	1540	CB	ILE	389	2.540	48.673	79.801	1.00
	22.90								
15	ATOM	1541	CG2	ILE	389	1.877	49.282	78.614	1.00
	25.50								
	ATOM	1542	CG1	ILE	389	3.364	49.629	80.675	1.00
	24.32								
20	ATOM	1543	CD1	ILE	389	3.584	49.158	82.104	1.00
	22.03								
	ATOM	1544	C	ILE	389	0.062	47.558	80.316	1.00
	23.87								
	ATOM	1545	O	ILE	389	-0.245	47.095	79.233	1.00
	24.93								
25	ATOM	1546	N	GLU	390	-0.831	47.762	81.277	1.00
	26.28								
	ATOM	1547	H	GLU	390	-0.512	48.078	82.143	1.00
	0.00								
	ATOM	1548	CA	GLU	390	-2.289	47.561	81.120	1.00
30	27.19								
	ATOM	1549	CB	GLU	390	-2.852	47.412	82.550	1.00
	28.06								
	ATOM	1550	CG	GLU	390	-1.738	46.634	83.317	1.00
	29.36								
35	ATOM	1551	CD	GLU	390	-2.098	45.949	84.591	1.00
	29.77								
	ATOM	1552	OE1	GLU	390	-2.656	44.821	84.536	1.00
	33.71								
40	ATOM	1553	OE2	GLU	390	-1.721	46.483	85.657	1.00
	32.83								
	ATOM	1554	C	GLU	390	-2.889	48.676	80.239	1.00
	27.94								
	ATOM	1555	O	GLU	390	-3.554	48.404	79.235	1.00
	28.70								
45	ATOM	1556	N	ASP	391	-2.544	49.914	80.562	1.00
	27.89								
	ATOM	1557	H	ASP	391	-2.136	49.831	81.347	1.00
	0.00								
	ATOM	1558	CA	ASP	391	-2.912	51.113	79.835	1.00
50	27.88								
	ATOM	1559	CB	ASP	391	-3.614	52.091	80.788	1.00
	28.06								
	ATOM	1560	CG	ASP	391	-4.958	51.566	81.269	1.00
	28.78								
55	ATOM	1561	OD1	ASP	391	-5.926	51.686	80.489	1.00
	31.01								
	ATOM	1562	OD2	ASP	391	-5.055	51.010	82.382	1.00
	30.51								

	ATOM	1563	C	ASP	391	-1.566	51.661	79.319	1.00
	28.40								
	ATOM	1564	O	ASP	391	-0.498	51.332	79.861	1.00
	30.70								
5	ATOM	1565	N	ASN	392	-1.584	52.451	78.264	1.00
	27.86								
	ATOM	1566	H	ASN	392	-2.449	52.738	77.912	1.00
	0.00								
10	ATOM	1567	CA	ASN	392	-0.347	52.988	77.662	1.00
	26.67								
	ATOM	1568	CB	ASN	392	-0.749	54.151	76.702	1.00
	27.44								
	ATOM	1569	CG	ASN	392	0.422	54.981	76.169	1.00
	27.68								
15	ATOM	1570	OD1	ASN	392	0.624	55.099	74.941	1.00
	30.22								
	ATOM	1571	ND2	ASN	392	1.103	55.672	77.069	1.00
	29.28								
20	ATOM	1572	HD21	ASN	392	0.826	55.624	78.013	1.00
	0.00								
	ATOM	1573	HD22	ASN	392	1.842	56.233	76.770	1.00
	0.00								
	ATOM	1574	C	ASN	392	0.852	53.313	78.597	1.00
	26.04								
25	ATOM	1575	O	ASN	392	2.002	52.961	78.245	1.00
	26.05								
	ATOM	1576	N	GLU	393	0.580	53.698	79.851	1.00
	24.55								
30	ATOM	1577	H	GLU	393	-0.346	53.711	80.181	1.00
	0.00								
	ATOM	1578	CA	GLU	393	1.659	54.131	80.765	1.00
	24.24								
	ATOM	1579	CB	GLU	393	1.533	55.661	80.775	1.00
	24.48								
35	ATOM	1580	CG	GLU	393	2.497	56.482	81.537	1.00
	26.69								
	ATOM	1581	CD	GLU	393	2.033	57.925	81.500	1.00
	27.72								
40	ATOM	1582	OE1	GLU	393	1.319	58.351	82.440	1.00
	29.14								
	ATOM	1583	OE2	GLU	393	2.348	58.613	80.499	1.00
	30.45								
	ATOM	1584	C	GLU	393	1.838	53.569	82.213	1.00
	23.01								
45	ATOM	1585	O	GLU	393	0.853	53.231	82.901	1.00
	24.00								
	ATOM	1586	N	PTR	394	3.101	53.425	82.647	1.00
	20.84								
50	ATOM	1587	CA	PTR	394	3.441	52.971	83.994	1.00
	19.86								
	ATOM	1588	C	PTR	394	3.985	54.192	84.730	1.00
	19.41								
	ATOM	1589	O	PTR	394	4.883	54.882	84.246	1.00
	18.42								
55	ATOM	1590	CB	PTR	394	4.521	51.850	83.989	1.00
	19.64								
	ATOM	1591	CG	PTR	394	4.825	51.286	85.369	1.00
	21.18								

	ATOM	1592	CD1	PTR	394	3.984	50.327	85.920	1.00
	22.60								
	ATOM	1593	CD2	PTR	394	5.940	51.714	86.104	1.00
	22.12								
5	ATOM	1594	CE1	PTR	394	4.263	49.820	87.180	1.00
	25.56								
	ATOM	1595	CE2	PTR	394	6.242	51.222	87.371	1.00
	25.23								
10	ATOM	1596	CZ	PTR	394	5.372	50.268	87.881	1.00
	27.46								
	ATOM	1597	OH	PTR	394	5.671	49.754	89.196	1.00
	32.26								
	ATOM	1598	P	PTR	394	6.483	50.612	90.322	1.00
	35.99								
15	ATOM	1599	O1P	PTR	394	7.817	50.767	89.802	1.00
	35.74								
	ATOM	1600	O2P	PTR	394	6.596	49.898	91.619	1.00
	35.31								
	ATOM	1601	O3P	PTR	394	5.885	52.009	90.479	1.00
20	36.41								
	ATOM	1602	N	THR	395	3.451	54.460	85.904	1.00
	20.04								
	ATOM	1603	H	THR	395	2.745	53.891	86.266	1.00
	0.00								
25	ATOM	1604	CA	THR	395	3.920	55.583	86.693	1.00
	20.75								
	ATOM	1605	CB	THR	395	2.722	56.526	87.037	1.00
	20.90								
	ATOM	1606	OG1	THR	395	2.160	57.062	85.828	1.00
30	21.39								
	ATOM	1607	HG1	THR	395	1.897	56.368	85.193	1.00
	0.00								
	ATOM	1608	CG2	THR	395	3.200	57.691	87.864	1.00
	22.70								
35	ATOM	1609	C	THR	395	4.652	55.047	87.929	1.00
	21.38								
	ATOM	1610	O	THR	395	4.100	54.294	88.718	1.00
	22.13								
	ATOM	1611	N	ALA	396	5.943	55.339	88.035	1.00
40	21.97								
	ATOM	1612	H	ALA	396	6.350	55.856	87.315	1.00
	0.00								
	ATOM	1613	CA	ALA	396	6.773	54.881	89.148	1.00
	23.48								
45	ATOM	1614	CB	ALA	396	8.240	55.170	88.811	1.00
	22.84								
	ATOM	1615	C	ALA	396	6.403	55.520	90.512	1.00
	24.59								
	ATOM	1616	O	ALA	396	5.348	56.123	90.650	1.00
50	25.45								
	ATOM	1617	N	ALA	397	7.319	55.433	91.486	1.00
	26.07								
	ATOM	1618	H	ALA	397	8.126	54.926	91.281	1.00
	0.00								
55	ATOM	1619	CA	ALA	397	7.172	55.993	92.851	1.00
	27.25								
	ATOM	1620	CB	ALA	397	7.836	55.050	93.836	1.00
	27.32								

	ATOM	1621	C	ALA	397	7.857	57.388	92.889	1.00
	28.09								
	ATOM	1622	O	ALA	397	8.990	57.494	92.435	1.00
	28.75								
5	ATOM	1623	N	GLU	398	7.210	58.451	93.407	1.00
	28.89								
	ATOM	1624	H	GLU	398	6.305	58.325	93.812	1.00
	0.00								
10	ATOM	1625	CA	GLU	398	7.837	59.794	93.419	1.00
	29.61								
	ATOM	1626	CB	GLU	398	7.099	60.823	94.308	1.00
	29.76								
	ATOM	1627	CG	GLU	398	5.801	61.413	93.737	1.00
	31.04								
15	ATOM	1628	CD	GLU	398	5.826	61.593	92.232	1.00
	31.85								
	ATOM	1629	OE1	GLU	398	6.686	62.342	91.720	1.00
	32.63								
20	ATOM	1630	OE2	GLU	398	4.983	60.957	91.549	1.00
	33.67								
	ATOM	1631	C	GLU	398	9.311	59.770	93.822	1.00
	29.08								
	ATOM	1632	O	GLU	398	10.149	60.476	93.225	1.00
	30.57								
25	ATOM	1633	N	GLY	399	9.626	58.912	94.793	1.00
	29.05								
	ATOM	1634	H	GLY	399	8.914	58.386	95.191	1.00
	0.00								
30	ATOM	1635	CA	GLY	399	10.993	58.770	95.265	1.00
	27.68								
	ATOM	1636	C	GLY	399	11.902	57.917	94.392	1.00
	27.05								
	ATOM	1637	O	GLY	399	13.124	58.061	94.489	1.00
	28.08								
35	ATOM	1638	N	ALA	400	11.343	57.016	93.575	1.00
	25.80								
	ATOM	1639	H	ALA	400	10.365	56.937	93.574	1.00
	0.00								
40	ATOM	1640	CA	ALA	400	12.147	56.140	92.690	1.00
	24.97								
	ATOM	1641	CB	ALA	400	11.230	55.264	91.820	1.00
	25.88								
	ATOM	1642	C	ALA	400	13.072	56.964	91.796	1.00
	24.08								
45	ATOM	1643	O	ALA	400	12.653	57.972	91.231	1.00
	23.69								
	ATOM	1644	N	ALA	401	14.325	56.527	91.684	1.00
	22.58								
50	ATOM	1645	H	ALA	401	14.587	55.709	92.161	1.00
	0.00								
	ATOM	1646	CA	ALA	401	15.321	57.231	90.873	1.00
	21.72								
	ATOM	1647	CB	ALA	401	16.440	57.756	91.750	1.00
	21.84								
55	ATOM	1648	C	ALA	401	15.898	56.360	89.770	1.00
	21.42								
	ATOM	1649	O	ALA	401	16.135	55.160	89.962	1.00
	22.02								

	ATOM	1650	N	PHE	402	16.136	56.968	88.606	1.00
	20.04								
	ATOM	1651	H	PHE	402	15.926	57.920	88.525	1.00
	0.00								
5	ATOM	1652	CA	PHE	402	16.670	56.251	87.433	1.00
	19.01								
	ATOM	1653	CB	PHE	402	15.592	56.187	86.349	1.00
	19.03								
10	ATOM	1654	CG	PHE	402	14.408	55.380	86.765	1.00
	19.84								
	ATOM	1655	CD1	PHE	402	13.389	55.961	87.520	1.00
	20.91								
	ATOM	1656	CD2	PHE	402	14.343	54.026	86.462	1.00
	21.47								
15	ATOM	1657	CE1	PHE	402	12.293	55.170	87.982	1.00
	20.57								
	ATOM	1658	CE2	PHE	402	13.290	53.251	86.902	1.00
	23.31								
20	ATOM	1659	CZ	PHE	402	12.265	53.819	87.662	1.00
	21.28								
	ATOM	1660	C	PHE	402	17.907	56.942	86.893	1.00
	17.86								
	ATOM	1661	O	PHE	402	18.087	58.127	87.156	1.00
	18.44								
25	ATOM	1662	N	PRO	403	18.787	56.220	86.178	1.00
	17.44								
	ATOM	1663	CD	PRO	403	18.730	54.779	85.882	1.00
	18.18								
30	ATOM	1664	CA	PRO	403	20.019	56.811	85.615	1.00
	16.59								
	ATOM	1665	CB	PRO	403	20.691	55.637	84.911	1.00
	17.23								
	ATOM	1666	CG	PRO	403	20.170	54.442	85.679	1.00
	18.61								
35	ATOM	1667	C	PRO	403	19.624	57.866	84.616	1.00
	14.73								
	ATOM	1668	O	PRO	403	18.987	57.605	83.596	1.00
	15.04								
40	ATOM	1669	N	ILE	404	20.022	59.080	84.919	1.00
	13.61								
	ATOM	1670	H	ILE	404	20.555	59.235	85.731	1.00
	0.00								
	ATOM	1671	CA	ILE	404	19.660	60.194	84.091	1.00
	12.30								
45	ATOM	1672	CB	ILE	404	20.203	61.528	84.721	1.00
	13.05								
	ATOM	1673	CG2	ILE	404	20.079	62.721	83.745	1.00
	13.72								
50	ATOM	1674	CG1	ILE	404	19.491	61.796	86.058	1.00
	14.98								
	ATOM	1675	CD1	ILE	404	18.033	61.960	85.911	1.00
	17.98								
	ATOM	1676	C	ILE	404	20.085	60.106	82.647	1.00
	11.12								
55	ATOM	1677	O	ILE	404	19.278	60.367	81.756	1.00
	11.56								
	ATOM	1678	N	LYS	405	21.318	59.670	82.381	1.00
	9.07								

	ATOM	1679	H	LYS	405	21.925	59.426	83.106	1.00
	0.00								
	ATOM	1680	CA	LYS	405	21.775	59.650	81.002	1.00
	7.63								
5	ATOM	1681	CB	LYS	405	23.300	59.453	80.911	1.00
	8.28								
	ATOM	1682	CG	LYS	405	24.061	60.612	81.557	1.00
	8.49								
	ATOM	1683	CD	LYS	405	25.564	60.423	81.441	1.00
10	11.13								
	ATOM	1684	CE	LYS	405	26.337	61.718	81.836	1.00
	13.18								
	ATOM	1685	NZ	LYS	405	27.805	61.777	81.368	1.00
	14.95								
15	ATOM	1686	HZ1	LYS	405	27.839	61.749	80.330	1.00
	0.00								
	ATOM	1687	HZ2	LYS	405	28.334	60.981	81.766	1.00
	0.00								
	ATOM	1688	HZ3	LYS	405	28.226	62.667	81.697	1.00
20	0.00								
	ATOM	1689	C	LYS	405	21.052	58.679	80.061	1.00
	6.24								
	ATOM	1690	O	LYS	405	21.100	58.871	78.838	1.00
	7.40								
25	ATOM	1691	N	TRP	406	20.392	57.651	80.619	1.00
	7.34								
	ATOM	1692	H	TRP	406	20.372	57.535	81.590	1.00
	0.00								
	ATOM	1693	CA	TRP	406	19.728	56.699	79.731	1.00
30	8.49								
	ATOM	1694	CB	TRP	406	20.042	55.244	80.160	1.00
	9.71								
	ATOM	1695	CG	TRP	406	21.321	54.748	79.711	1.00
	10.18								
35	ATOM	1696	CD2	TRP	406	22.566	54.922	80.368	1.00
	10.17								
	ATOM	1697	CE2	TRP	406	23.535	54.241	79.595	1.00
	9.32								
	ATOM	1698	CE3	TRP	406	22.971	55.598	81.535	1.00
40	10.29								
	ATOM	1699	CD1	TRP	406	21.558	54.016	78.589	1.00
	10.80								
	ATOM	1700	NE1	TRP	406	22.902	53.695	78.517	1.00
	10.93								
45	ATOM	1701	HE1	TRP	406	23.320	53.164	77.823	1.00
	0.00								
	ATOM	1702	CZ2	TRP	406	24.874	54.205	79.959	1.00
	11.02								
	ATOM	1703	CZ3	TRP	406	24.319	55.569	81.898	1.00
50	11.88								
	ATOM	1704	CH2	TRP	406	25.251	54.877	81.105	1.00
	9.69								
	ATOM	1705	C	TRP	406	18.212	56.820	79.719	1.00
	9.42								
55	ATOM	1706	O	TRP	406	17.516	56.222	78.871	1.00
	10.08								
	ATOM	1707	N	THR	407	17.706	57.613	80.652	1.00
	9.02								



	ATOM	1708	H	THR	407	18.294	58.157	81.200	1.00
	0.00								
	ATOM	1709	CA	THR	407	16.266	57.673	80.873	1.00
	10.08								
5	ATOM	1710	CB	THR	407	15.984	57.741	82.376	1.00
	10.72								
	ATOM	1711	OG1	THR	407	16.657	56.670	83.062	1.00
	12.59								
10	ATOM	1712	HG1	THR	407	16.372	55.818	82.760	1.00
	0.00								
	ATOM	1713	CG2	THR	407	14.467	57.617	82.608	1.00
	11.37								
	ATOM	1714	C	THR	407	15.592	58.819	80.107	1.00
	9.61								
15	ATOM	1715	O	THR	407	16.076	59.955	80.078	1.00
	10.13								
	ATOM	1716	N	ALA	408	14.445	58.539	79.500	1.00
	9.86								
	ATOM	1717	H	ALA	408	14.056	57.662	79.573	1.00
20	0.00								
	ATOM	1718	CA	ALA	408	13.718	59.566	78.744	1.00
	9.33								
	ATOM	1719	CB	ALA	408	12.465	58.939	78.127	1.00
	10.37								
25	ATOM	1720	C	ALA	408	13.292	60.704	79.640	1.00
	10.07								
	ATOM	1721	O	ALA	408	12.984	60.480	80.805	1.00
	9.61								
30	ATOM	1722	N	PRO	409	13.198	61.913	79.077	1.00
	10.63								
	ATOM	1723	CD	PRO	409	13.575	62.330	77.706	1.00
	11.82								
	ATOM	1724	CA	PRO	409	12.791	63.079	79.881	1.00
	12.32								
35	ATOM	1725	CB	PRO	409	12.689	64.185	78.837	1.00
	12.27								
	ATOM	1726	CG	PRO	409	13.791	63.853	77.886	1.00
	13.12								
40	ATOM	1727	C	PRO	409	11.497	62.906	80.643	1.00
	11.72								
	ATOM	1728	O	PRO	409	11.425	63.271	81.807	1.00
	12.12								
	ATOM	1729	N	GLU	410	10.460	62.394	79.989	1.00
	11.64								
45	ATOM	1730	H	GLU	410	10.569	62.124	79.053	1.00
	0.00								
	ATOM	1731	CA	GLU	410	9.169	62.201	80.675	1.00
	12.82								
50	ATOM	1732	CB	GLU	410	8.100	61.709	79.705	1.00
	13.13								
	ATOM	1733	CG	GLU	410	8.302	60.285	79.208	1.00
	14.50								
	ATOM	1734	CD	GLU	410	9.158	60.157	77.949	1.00
	14.16								
55	ATOM	1735	OE1	GLU	410	9.883	61.116	77.527	1.00
	13.49								
	ATOM	1736	OE2	GLU	410	9.065	59.066	77.349	1.00
	12.30								

	ATOM	1737	C	GLU	410	9.271	61.294	81.893	1.00
	13.03								
	ATOM	1738	O	GLU	410	8.546	61.457	82.882	1.00
	12.80								
5	ATOM	1739	N	ALA	411	10.166	60.309	81.848	1.00
	12.07								
	ATOM	1740	H	ALA	411	10.709	60.180	81.049	1.00
	0.00								
10	ATOM	1741	CA	ALA	411	10.349	59.452	82.995	1.00
	13.48								
	ATOM	1742	CB	ALA	411	11.013	58.115	82.544	1.00
	11.89								
	ATOM	1743	C	ALA	411	11.148	60.152	84.098	1.00
	13.86								
15	ATOM	1744	O	ALA	411	10.810	60.060	85.261	1.00
	14.48								
	ATOM	1745	N	ILE	412	12.181	60.902	83.730	1.00
	14.47								
	ATOM	1746	H	ILE	412	12.449	60.948	82.784	1.00
	0.00								
20	ATOM	1747	CA	ILE	412	12.948	61.654	84.744	1.00
	14.35								
	ATOM	1748	CB	ILE	412	14.113	62.409	84.064	1.00
	14.57								
25	ATOM	1749	CG2	ILE	412	14.727	63.480	85.056	1.00
	13.67								
	ATOM	1750	CG1	ILE	412	15.170	61.407	83.604	1.00
	14.89								
30	ATOM	1751	CD1	ILE	412	16.276	62.054	82.716	1.00
	14.65								
	ATOM	1752	C	ILE	412	12.055	62.706	85.440	1.00
	14.72								
	ATOM	1753	O	ILE	412	12.011	62.786	86.680	1.00
	14.64								
35	ATOM	1754	N	ASN	413	11.264	63.399	84.631	1.00
	14.43								
	ATOM	1755	H	ASN	413	11.230	63.156	83.690	1.00
	0.00								
40	ATOM	1756	CA	ASN	413	10.414	64.489	85.121	1.00
	15.79								
	ATOM	1757	CB	ASN	413	10.114	65.441	83.970	1.00
	14.72								
	ATOM	1758	CG	ASN	413	11.378	66.139	83.446	1.00
	15.01								
45	ATOM	1759	OD1	ASN	413	12.294	66.321	84.194	1.00
	17.88								
	ATOM	1760	ND2	ASN	413	11.434	66.458	82.163	1.00
	16.83								
50	ATOM	1761	HD21	ASN	413	10.665	66.243	81.576	1.00
	0.00								
	ATOM	1762	HD22	ASN	413	12.214	66.918	81.835	1.00
	0.00								
	ATOM	1763	C	ASN	413	9.123	64.113	85.824	1.00
	16.85								
55	ATOM	1764	O	ASN	413	8.785	64.680	86.890	1.00
	17.54								
	ATOM	1765	N	TYR	414	8.403	63.169	85.228	1.00
	17.67								

	ATOM	1766	H	TYR	414	8.738	62.752	84.418	1.00
	0.00								
	ATOM	1767	CA	TYR	414	7.107	62.737	85.758	1.00
	17.90								
5	ATOM	1768	CB	TYR	414	6.048	62.839	84.688	1.00
	19.12								
	ATOM	1769	CG	TYR	414	6.139	64.092	83.865	1.00
	20.66								
	ATOM	1770	CD1	TYR	414	6.223	65.333	84.472	1.00
10	22.51								
	ATOM	1771	CE1	TYR	414	6.327	66.490	83.720	1.00
	22.39								
	ATOM	1772	CD2	TYR	414	6.149	64.043	82.495	1.00
	21.40								
15	ATOM	1773	CE2	TYR	414	6.247	65.200	81.720	1.00
	22.03								
	ATOM	1774	CZ	TYR	414	6.336	66.425	82.358	1.00
	23.14								
	ATOM	1775	OH	TYR	414	6.444	67.606	81.635	1.00
20	25.51								
	ATOM	1776	HH	TYR	414	6.465	68.348	82.243	1.00
	0.00								
	ATOM	1777	C	TYR	414	7.038	61.353	86.348	1.00
	17.97								
25	ATOM	1778	O	TYR	414	6.048	61.020	87.011	1.00
	18.36								
	ATOM	1779	N	GLY	415	8.045	60.530	86.081	1.00
	16.60								
	ATOM	1780	H	GLY	415	8.790	60.830	85.527	1.00
30	0.00								
	ATOM	1781	CA	GLY	415	8.034	59.166	86.595	1.00
	16.06								
	ATOM	1782	C	GLY	415	7.196	58.284	85.676	1.00
	15.74								
35	ATOM	1783	O	GLY	415	6.907	57.111	86.023	1.00
	16.26								
	ATOM	1784	N	THR	416	6.808	58.837	84.532	1.00
	14.68								
	ATOM	1785	H	THR	416	7.093	59.754	84.321	1.00
40	0.00								
	ATOM	1786	CA	THR	416	5.973	58.145	83.554	1.00
	15.57								
	ATOM	1787	CB	THR	416	5.028	59.079	82.786	1.00
	17.57								
45	ATOM	1788	OG1	THR	416	5.779	60.132	82.169	1.00
	19.26								
	ATOM	1789	HG1	THR	416	6.231	60.639	82.836	1.00
	0.00								
	ATOM	1790	CG2	THR	416	3.995	59.699	83.736	1.00
50	19.13								
	ATOM	1791	C	THR	416	6.800	57.401	82.524	1.00
	14.21								
	ATOM	1792	O	THR	416	7.593	57.995	81.760	1.00
	15.67								
55	ATOM	1793	N	PHE	417	6.511	56.115	82.405	1.00
	12.09								
	ATOM	1794	H	PHE	417	5.818	55.722	82.957	1.00
	0.00								

5	ATOM 11.30	1795	CA	PHE	417	7.231	55.271	81.441	1.00
	ATOM 11.23	1796	CB	PHE	417	7.924	54.118	82.168	1.00
	ATOM 10.41	1797	CG	PHE	417	9.090	54.535	82.997	1.00
	ATOM 9.97	1798	CD1	PHE	417	8.916	54.991	84.293	1.00
10	ATOM 9.23	1799	CD2	PHE	417	10.388	54.409	82.486	1.00
	ATOM 12.35	1800	CE1	PHE	417	10.009	55.309	85.091	1.00
	ATOM 9.51	1801	CE2	PHE	417	11.462	54.713	83.243	1.00
15	ATOM 9.78	1802	CZ	PHE	417	11.311	55.166	84.558	1.00
	ATOM 11.10	1803	C	PHE	417	6.300	54.610	80.450	1.00
	ATOM 11.90	1804	O	PHE	417	5.198	54.172	80.821	1.00
20	ATOM 10.15	1805	N	THR	418	6.715	54.593	79.183	1.00
	ATOM 0.00	1806	H	THR	418	7.525	55.089	78.952	1.00
	ATOM 9.74	1807	CA	THR	418	5.982	53.852	78.127	1.00
25	ATOM 10.54	1808	CB	THR	418	5.140	54.725	77.164	1.00
	ATOM 12.41	1809	OG1	THR	418	5.972	55.497	76.304	1.00
	ATOM 0.00	1810	HG1	THR	418	6.542	54.913	75.812	1.00
30	ATOM 12.42	1811	CG2	THR	418	4.244	55.659	77.943	1.00
	ATOM 8.07	1812	C	THR	418	7.019	53.150	77.269	1.00
	ATOM 8.89	1813	O	THR	418	8.245	53.304	77.522	1.00
40	ATOM 7.32	1814	N	ILE	419	6.569	52.350	76.289	1.00
	ATOM 0.00	1815	H	ILE	419	5.621	52.202	76.165	1.00
	ATOM 6.24	1816	CA	ILE	419	7.551	51.741	75.415	1.00
45	ATOM 6.09	1817	CB	ILE	419	6.871	50.730	74.410	1.00
	ATOM 5.86	1818	CG2	ILE	419	6.082	51.511	73.346	1.00
	ATOM 6.62	1819	CG1	ILE	419	7.893	49.841	73.669	1.00
50	ATOM 7.43	1820	CD1	ILE	419	8.604	48.853	74.599	1.00
	ATOM 6.54	1821	C	ILE	419	8.387	52.838	74.702	1.00
	ATOM 6.86	1822	O	ILE	419	9.534	52.607	74.300	1.00
55	ATOM 7.02	1823	N	LYS	420	7.813	54.056	74.546	1.00

	ATOM 0.00	1824	H	LYS	420	6.898	54.194	74.832	1.00
	ATOM 5.39	1825	CA	LYS	420	8.559	55.133	73.922	1.00
5	ATOM 6.87	1826	CB	LYS	420	7.616	56.295	73.620	1.00
	ATOM 7.82	1827	CG	LYS	420	6.565	55.987	72.532	1.00
10	ATOM 7.78	1828	CD	LYS	420	7.083	55.455	71.200	1.00
	ATOM 8.97	1829	CE	LYS	420	5.959	55.208	70.159	1.00
	ATOM 10.61	1830	NZ	LYS	420	6.486	54.574	68.971	1.00
15	ATOM 0.00	1831	HZ1	LYS	420	6.912	53.650	69.230	1.00
	ATOM 0.00	1832	HZ2	LYS	420	7.218	55.159	68.535	1.00
20	ATOM 0.00	1833	HZ3	LYS	420	5.725	54.392	68.287	1.00
	ATOM 5.31	1834	C	LYS	420	9.739	55.639	74.781	1.00
	ATOM 5.39	1835	O	LYS	420	10.681	56.226	74.222	1.00
25	ATOM 3.40	1836	N	SER	421	9.680	55.442	76.096	0.84
	ATOM 0.00	1837	H	SER	421	8.867	55.039	76.461	1.00
30	ATOM 4.39	1838	CA	SER	421	10.775	55.769	77.032	0.84
	ATOM 6.53	1839	CB	SER	421	10.275	55.628	78.498	0.84
	ATOM 8.78	1840	OG	SER	421	9.071	56.399	78.631	0.84
35	ATOM 0.00	1841	HG	SER	421	9.278	57.326	78.452	1.00
	ATOM 4.17	1842	C	SER	421	11.898	54.774	76.723	0.84
40	ATOM 4.10	1843	O	SER	421	13.080	55.127	76.738	0.84
	ATOM 5.50	1844	N	ASP	422	11.518	53.528	76.443	1.00
	ATOM 0.00	1845	H	ASP	422	10.584	53.272	76.460	1.00
45	ATOM 4.75	1846	CA	ASP	422	12.551	52.540	76.115	1.00
	ATOM 6.52	1847	CB	ASP	422	11.990	51.100	76.040	1.00
50	ATOM 7.22	1848	CG	ASP	422	11.724	50.489	77.392	1.00
	ATOM 7.55	1849	OD1	ASP	422	12.227	50.919	78.460	1.00
	ATOM 9.72	1850	OD2	ASP	422	10.893	49.543	77.380	1.00
55	ATOM 4.30	1851	C	ASP	422	13.207	52.883	74.792	1.00
	ATOM 4.83	1852	O	ASP	422	14.360	52.585	74.579	1.00

	ATOM	1853	N	VAL	423	12.452	53.444	73.844	1.00
	2.28								
	ATOM	1854	H	VAL	423	11.503	53.580	74.014	1.00
	0.00								
5	ATOM	1855	CA	VAL	423	12.995	53.847	72.548	1.00
	3.14								
	ATOM	1856	CB	VAL	423	11.870	54.339	71.631	1.00
	4.31								
10	ATOM	1857	CG1	VAL	423	12.411	55.008	70.401	1.00
	4.11								
	ATOM	1858	CG2	VAL	423	11.022	53.087	71.158	1.00
	3.98								
	ATOM	1859	C	VAL	423	14.065	54.930	72.776	1.00
	3.64								
15	ATOM	1860	O	VAL	423	15.079	54.888	72.121	1.00
	3.31								
	ATOM	1861	N	TRP	424	13.786	55.881	73.692	1.00
	3.87								
20	ATOM	1862	H	TRP	424	12.905	55.865	74.141	1.00
	0.00								
	ATOM	1863	CA	TRP	424	14.793	56.897	74.008	1.00
	4.26								
	ATOM	1864	CB	TRP	424	14.230	57.847	75.110	1.00
	4.58								
25	ATOM	1865	CG	TRP	424	15.218	58.908	75.524	1.00
	5.10								
	ATOM	1866	CD2	TRP	424	15.190	60.294	75.147	1.00
	5.67								
30	ATOM	1867	CE2	TRP	424	16.342	60.888	75.701	1.00
	5.11								
	ATOM	1868	CE3	TRP	424	14.271	61.078	74.416	1.00
	5.52								
	ATOM	1869	CD1	TRP	424	16.339	58.728	76.275	1.00
	5.45								
35	ATOM	1870	NE1	TRP	424	17.025	59.928	76.388	1.00
	6.04								
	ATOM	1871	HE1	TRP	424	17.870	60.056	76.863	1.00
	0.00								
40	ATOM	1872	CZ2	TRP	424	16.629	62.268	75.548	1.00
	4.89								
	ATOM	1873	CZ3	TRP	424	14.539	62.462	74.268	1.00
	5.83								
	ATOM	1874	CH2	TRP	424	15.722	63.031	74.842	1.00
	6.03								
45	ATOM	1875	C	TRP	424	16.085	56.161	74.467	1.00
	4.03								
	ATOM	1876	O	TRP	424	17.190	56.513	74.008	1.00
	3.83								
50	ATOM	1877	N	SER	425	15.925	55.282	75.435	0.74
	2.00								
	ATOM	1878	H	SER	425	15.019	55.122	75.789	1.00
	0.00								
	ATOM	1879	CA	SER	425	17.053	54.556	76.005	0.74
	2.00								
55	ATOM	1880	CB	SER	425	16.530	53.590	77.044	0.74
	2.00								
	ATOM	1881	OG	SER	425	15.918	54.259	78.131	0.74
	3.21								

	ATOM 0.00	1882	HG	SER	425	15.179	54.793	77.793	1.00
	ATOM 2.61	1883	C	SER	425	17.818	53.835	74.915	0.74
5	ATOM 2.00	1884	O	SER	425	19.051	53.752	74.965	0.74
	ATOM 3.61	1885	N	PHE	426	17.094	53.193	73.991	1.00
10	ATOM 0.00	1886	H	PHE	426	16.127	53.188	74.079	1.00
	ATOM 3.25	1887	CA	PHE	426	17.736	52.496	72.870	1.00
	ATOM 3.78	1888	CB	PHE	426	16.676	51.897	71.952	1.00
15	ATOM 2.99	1889	CG	PHE	426	17.238	51.086	70.836	1.00
	ATOM 3.53	1890	CD1	PHE	426	17.786	49.829	71.097	1.00
20	ATOM 3.33	1891	CD2	PHE	426	17.250	51.580	69.532	1.00
	ATOM 3.60	1892	CE1	PHE	426	18.341	49.085	70.044	1.00
	ATOM 4.33	1893	CE2	PHE	426	17.809	50.846	68.476	1.00
25	ATOM 2.26	1894	CZ	PHE	426	18.369	49.551	68.755	1.00
	ATOM 4.19	1895	C	PHE	426	18.651	53.445	72.081	1.00
30	ATOM 4.20	1896	O	PHE	426	19.742	53.059	71.648	1.00
	ATOM 3.62	1897	N	GLY	427	18.198	54.674	71.882	1.00
	ATOM 0.00	1898	H	GLY	427	17.307	54.940	72.200	1.00
35	ATOM 4.54	1899	CA	GLY	427	19.084	55.593	71.185	1.00
	ATOM 2.74	1900	C	GLY	427	20.399	55.766	71.964	1.00
40	ATOM 3.03	1901	O	GLY	427	21.434	55.911	71.318	1.00
	ATOM 2.87	1902	N	ILE	428	20.319	55.912	73.279	1.00
	ATOM 0.00	1903	H	ILE	428	19.437	55.901	73.706	1.00
45	ATOM 2.59	1904	CA	ILE	428	21.504	56.074	74.098	1.00
	ATOM 3.04	1905	CB	ILE	428	21.141	56.366	75.562	1.00
50	ATOM 4.80	1906	CG2	ILE	428	22.405	56.537	76.405	1.00
	ATOM 3.89	1907	CG1	ILE	428	20.191	57.589	75.641	1.00
	ATOM 5.08	1908	CD1	ILE	428	20.795	58.952	75.169	1.00
55	ATOM 4.70	1909	C	ILE	428	22.326	54.782	73.967	1.00
	ATOM 4.68	1910	O	ILE	428	23.565	54.797	73.895	1.00

	ATOM	1911	N	LEU	429	21.634	53.638	74.001	1.00
	3.61								
	ATOM	1912	H	LEU	429	20.677	53.651	74.121	1.00
	0.00								
5	ATOM	1913	CA	LEU	429	22.384	52.370	73.868	1.00
	4.69								
	ATOM	1914	CB	LEU	429	21.388	51.184	74.005	1.00
	5.24								
10	ATOM	1915	CG	LEU	429	21.962	49.763	74.217	1.00
	7.89								
	ATOM	1916	CD1	LEU	429	20.803	48.836	74.587	1.00
	6.69								
	ATOM	1917	CD2	LEU	429	22.640	49.187	73.029	1.00
	11.59								
15	ATOM	1918	C	LEU	429	23.177	52.328	72.528	1.00
	5.16								
	ATOM	1919	O	LEU	429	24.305	51.787	72.453	1.00
	6.28								
20	ATOM	1920	N	LEU	430	22.593	52.823	71.446	1.00
	4.85								
	ATOM	1921	H	LEU	430	21.691	53.201	71.500	1.00
	0.00								
	ATOM	1922	CA	LEU	430	23.267	52.837	70.158	1.00
	4.09								
25	ATOM	1923	CB	LEU	430	22.427	53.499	69.089	1.00
	4.96								
	ATOM	1924	CG	LEU	430	21.181	52.736	68.615	1.00
	4.92								
30	ATOM	1925	CD1	LEU	430	20.499	53.563	67.511	1.00
	5.50								
	ATOM	1926	CD2	LEU	430	21.616	51.344	68.039	1.00
	5.64								
	ATOM	1927	C	LEU	430	24.603	53.638	70.329	1.00
	5.14								
35	ATOM	1928	O	LEU	430	25.588	53.283	69.729	1.00
	4.63								
	ATOM	1929	N	THR	431	24.631	54.686	71.143	1.00
	4.15								
40	ATOM	1930	H	THR	431	23.820	54.932	71.629	1.00
	0.00								
	ATOM	1931	CA	THR	431	25.907	55.419	71.331	1.00
	4.99								
	ATOM	1932	CB	THR	431	25.775	56.788	72.128	1.00
	3.81								
45	ATOM	1933	OG1	THR	431	25.535	56.607	73.521	1.00
	5.06								
	ATOM	1934	HG1	THR	431	26.285	56.125	73.912	1.00
	0.00								
50	ATOM	1935	CG2	THR	431	24.682	57.599	71.511	1.00
	5.88								
	ATOM	1936	C	THR	431	26.916	54.513	72.030	1.00
	5.33								
	ATOM	1937	O	THR	431	28.093	54.577	71.725	1.00
	6.80								
55	ATOM	1938	N	GLU	432	26.460	53.731	72.981	1.00
	4.68								
	ATOM	1939	H	GLU	432	25.506	53.772	73.212	1.00
	0.00								



5	ATOM 5.06	1940	CA	GLU	432	27.364	52.789	73.682	1.00
	ATOM 5.36	1941	CB	GLU	432	26.667	52.087	74.838	1.00
	ATOM 5.97	1942	CG	GLU	432	26.109	52.989	75.912	1.00
	ATOM 7.12	1943	CD	GLU	432	25.472	52.155	76.997	1.00
	ATOM 7.06	1944	OE1	GLU	432	24.291	51.757	76.844	1.00
10	ATOM 9.86	1945	OE2	GLU	432	26.173	51.808	77.959	1.00
	ATOM 5.32	1946	C	GLU	432	27.937	51.795	72.693	1.00
	ATOM 6.10	1947	O	GLU	432	29.106	51.418	72.820	1.00
15	ATOM 5.34	1948	N	ILE	433	27.142	51.324	71.755	1.00
	ATOM 0.00	1949	H	ILE	433	26.222	51.617	71.690	1.00
	ATOM 6.31	1950	CA	ILE	433	27.658	50.357	70.802	1.00
	ATOM 6.14	1951	CB	ILE	433	26.526	49.749	69.990	1.00
	ATOM 8.93	1952	CG2	ILE	433	27.062	49.005	68.759	1.00
20	ATOM 7.33	1953	CG1	ILE	433	25.675	48.945	70.934	1.00
	ATOM 7.92	1954	CD1	ILE	433	24.435	48.475	70.211	1.00
	ATOM 7.78	1955	C	ILE	433	28.729	50.918	69.892	1.00
	ATOM 8.65	1956	O	ILE	433	29.844	50.386	69.783	1.00
	ATOM 7.33	1957	N	VAL	434	28.471	52.097	69.358	1.00
25	ATOM 0.00	1958	H	VAL	434	27.642	52.564	69.591	1.00
	ATOM 10.01	1959	CA	VAL	434	29.398	52.699	68.407	1.00
	ATOM 11.32	1960	CB	VAL	434	28.641	53.800	67.535	1.00
	ATOM 12.92	1961	CG1	VAL	434	28.540	55.063	68.298	1.00
	ATOM 14.45	1962	CG2	VAL	434	29.302	53.940	66.124	1.00
30	ATOM 8.29	1963	C	VAL	434	30.685	53.258	69.077	1.00
	ATOM 10.84	1964	O	VAL	434	31.717	53.362	68.411	1.00
	ATOM 8.17	1965	N	THR	435	30.662	53.505	70.374	1.00
	ATOM 0.00	1966	H	THR	435	29.839	53.362	70.876	1.00
	ATOM 9.24	1967	CA	THR	435	31.862	54.008	71.060	1.00
35	ATOM 8.60	1968	CB	THR	435	31.531	55.127	72.051	1.00

	ATOM	1969	OG1	THR	435	30.671	54.649	73.101	1.00
	9.12								
	ATOM	1970	HG1	THR	435	30.469	55.385	73.698	1.00
	0.00								
5	ATOM	1971	CG2	THR	435	30.850	56.305	71.301	1.00
	9.20								
	ATOM	1972	C	THR	435	32.545	52.895	71.865	1.00
	10.34								
10	ATOM	1973	O	THR	435	33.336	53.175	72.766	1.00
	10.87								
	ATOM	1974	N	HIS	436	32.180	51.642	71.590	1.00
	10.82								
	ATOM	1975	H	HIS	436	31.537	51.471	70.873	1.00
	0.00								
15	ATOM	1976	CA	HIS	436	32.744	50.530	72.347	1.00
	11.46								
	ATOM	1977	CB	HIS	436	34.154	50.167	71.849	1.00
	15.05								
	ATOM	1978	CG	HIS	436	34.179	49.627	70.461	1.00
20	16.72								
	ATOM	1979	CD2	HIS	436	34.109	50.254	69.243	1.00
	18.23								
	ATOM	1980	ND1	HIS	436	34.283	48.283	70.183	1.00
	18.71								
25	ATOM	1981	HD1	HIS	436	34.338	47.562	70.852	1.00
	0.00								
	ATOM	1982	CE1	HIS	436	34.284	48.090	68.872	1.00
	17.96								
	ATOM	1983	NE2	HIS	436	34.177	49.279	68.287	1.00
30	19.69								
	ATOM	1984	HE2	HIS	436	34.183	49.421	67.315	1.00
	0.00								
	ATOM	1985	C	HIS	436	32.630	50.659	73.865	1.00
	10.91								
35	ATOM	1986	O	HIS	436	33.569	50.410	74.667	1.00
	12.67								
	ATOM	1987	N	GLY	437	31.418	51.025	74.291	1.00
	9.46								
	ATOM	1988	H	GLY	437	30.733	51.246	73.653	1.00
40	0.00								
	ATOM	1989	CA	GLY	437	31.120	51.097	75.702	1.00
	9.96								
	ATOM	1990	C	GLY	437	31.404	52.372	76.462	1.00
	9.49								
45	ATOM	1991	O	GLY	437	31.325	52.346	77.682	1.00
	11.99								
	ATOM	1992	N	ARG	438	31.665	53.481	75.758	0.58
	7.77								
	ATOM	1993	H	ARG	438	31.690	53.422	74.773	1.00
50	0.00								
	ATOM	1994	CA	ARG	438	31.923	54.759	76.429	0.58
	8.40								
	ATOM	1995	CB	ARG	438	32.404	55.805	75.404	0.58
	8.52								
55	ATOM	1996	CG	ARG	438	33.030	57.083	75.974	0.58
	11.45								
	ATOM	1997	CD	ARG	438	33.486	58.066	74.874	0.58
	12.12								

	ATOM 15.11	1998	NE	ARG	438	34.280	59.175	75.424	0.58
	ATOM 0.00	1999	HE	ARG	438	34.611	59.088	76.334	1.00
5	ATOM 16.05	2000	CZ	ARG	438	34.590	60.280	74.744	0.58
	ATOM 17.29	2001	NH1	ARG	438	34.178	60.439	73.497	0.58
10	ATOM 0.00	2002	HH11	ARG	438	33.631	59.718	73.051	1.00
	ATOM 0.00	2003	HH12	ARG	438	34.407	61.263	72.984	1.00
	ATOM 18.16	2004	NH2	ARG	438	35.305	61.241	75.310	0.58
15	ATOM 0.00	2005	HH21	ARG	438	35.597	61.150	76.254	1.00
	ATOM 0.00	2006	HH22	ARG	438	35.513	62.069	74.786	1.00
	ATOM 7.24	2007	C	ARG	438	30.638	55.243	77.108	0.58
20	ATOM 6.64	2008	O	ARG	438	29.530	54.895	76.655	0.58
	ATOM 8.97	2009	N	ILE	439	30.788	56.029	78.180	1.00
25	ATOM 0.00	2010	H	ILE	439	31.697	56.242	78.475	1.00
	ATOM 7.88	2011	CA	ILE	439	29.652	56.580	78.934	1.00
30	ATOM 11.18	2012	CB	ILE	439	30.127	57.170	80.287	1.00
	ATOM 12.03	2013	CG2	ILE	439	29.026	58.024	80.928	1.00
	ATOM 11.96	2014	CG1	ILE	439	30.520	56.025	81.211	1.00
35	ATOM 16.69	2015	CD1	ILE	439	30.889	56.512	82.575	1.00
	ATOM 6.45	2016	C	ILE	439	29.019	57.675	78.071	1.00
40	ATOM 8.58	2017	O	ILE	439	29.737	58.458	77.417	1.00
	ATOM 2.25	2018	N	PRO	440	27.679	57.686	77.963	0.43
	ATOM 2.56	2019	CD	PRO	440	26.708	56.716	78.495	0.43
45	ATOM 2.00	2020	CA	PRO	440	27.017	58.710	77.139	0.43
	ATOM 2.00	2021	CB	PRO	440	25.524	58.333	77.243	0.43
50	ATOM 3.05	2022	CG	PRO	440	25.420	57.491	78.427	0.43
	ATOM 2.00	2023	C	PRO	440	27.283	60.131	77.622	0.43
	ATOM 2.00	2024	O	PRO	440	27.587	60.341	78.809	0.43
55	ATOM 6.28	2025	N	TYR	441	27.115	61.092	76.706	1.00
	ATOM 0.00	2026	H	TYR	441	26.831	60.842	75.803	1.00

5	ATOM 7.84	2027	CA	TYR	441	27.326	62.520	77.049	1.00
	ATOM 7.07	2028	CB	TYR	441	26.252	63.053	77.985	1.00
	ATOM 5.21	2029	CG	TYR	441	24.850	62.862	77.431	1.00
	ATOM 5.50	2030	CD1	TYR	441	24.301	63.763	76.504	1.00
	ATOM 5.71	2031	CE1	TYR	441	22.974	63.602	76.058	1.00
10	ATOM 6.20	2032	CD2	TYR	441	24.055	61.788	77.859	1.00
	ATOM 4.20	2033	CE2	TYR	441	22.764	61.625	77.394	1.00
	ATOM 5.80	2034	CZ	TYR	441	22.220	62.538	76.516	1.00
15	ATOM 4.13	2035	OH	TYR	441	20.911	62.422	76.164	1.00
	ATOM 0.00	2036	HH	TYR	441	20.531	61.671	76.616	1.00
	ATOM 10.50	2037	C	TYR	441	28.682	62.737	77.679	1.00
	ATOM 9.67	2038	O	TYR	441	28.786	63.196	78.818	1.00
25	ATOM 11.93	2039	N	PRO	442	29.724	62.483	76.898	1.00
	ATOM 12.53	2040	CD	PRO	442	29.751	62.094	75.473	1.00
	ATOM 14.05	2041	CA	PRO	442	31.074	62.657	77.425	1.00
30	ATOM 14.29	2042	CB	PRO	442	31.962	62.268	76.249	1.00
	ATOM 13.87	2043	CG	PRO	442	31.118	61.497	75.363	1.00
	ATOM 13.17	2044	C	PRO	442	31.424	64.044	77.967	1.00
35	ATOM 14.67	2045	O	PRO	442	31.135	65.088	77.356	1.00
	ATOM 14.90	2046	N	GLY	443	31.980	64.003	79.166	1.00
	ATOM 0.00	2047	H	GLY	443	32.060	63.141	79.622	1.00
40	ATOM 14.50	2048	CA	GLY	443	32.438	65.214	79.838	1.00
	ATOM 15.21	2049	C	GLY	443	31.325	66.026	80.453	1.00
	ATOM 15.80	2050	O	GLY	443	31.535	67.204	80.844	1.00
45	ATOM 13.04	2051	N	MET	444	30.152	65.405	80.572	1.00
	ATOM 0.00	2052	H	MET	444	30.072	64.473	80.280	1.00
	ATOM 12.08	2053	CA	MET	444	29.011	66.110	81.133	1.00
55	ATOM 12.69	2054	CB	MET	444	27.904	66.247	80.081	1.00
	ATOM 14.01	2055	CG	MET	444	28.365	66.809	78.745	1.00

	ATOM	2056	SD	MET	444	27.083	66.990	77.487	1.00
	13.68								
	ATOM	2057	CE	MET	444	25.864	67.933	78.292	1.00
	13.90								
5	ATOM	2058	C	MET	444	28.428	65.477	82.376	1.00
	11.03								
	ATOM	2059	O	MET	444	28.302	64.250	82.459	1.00
	11.68								
10	ATOM	2060	N	THR	445	28.069	66.325	83.341	1.00
	9.53								
	ATOM	2061	H	THR	445	28.272	67.272	83.235	1.00
	0.00								
	ATOM	2062	CA	THR	445	27.399	65.870	84.550	1.00
	9.56								
15	ATOM	2063	CB	THR	445	27.493	66.906	85.671	1.00
	11.45								
	ATOM	2064	OG1	THR	445	26.787	68.112	85.278	1.00
	11.07								
20	ATOM	2065	HG1	THR	445	27.181	68.455	84.470	1.00
	0.00								
	ATOM	2066	CG2	THR	445	28.985	67.231	85.975	1.00
	13.08								
	ATOM	2067	C	THR	445	25.901	65.711	84.260	1.00
	8.59								
25	ATOM	2068	O	THR	445	25.408	66.221	83.254	1.00
	8.79								
	ATOM	2069	N	ASN	446	25.168	65.098	85.182	1.00
	9.38								
30	ATOM	2070	H	ASN	446	25.593	64.726	85.988	1.00
	0.00								
	ATOM	2071	CA	ASN	446	23.726	64.966	84.978	1.00
	10.56								
	ATOM	2072	CB	ASN	446	23.111	64.095	86.052	1.00
	12.38								
35	ATOM	2073	CG	ASN	446	23.480	62.637	85.888	1.00
	13.78								
	ATOM	2074	OD1	ASN	446	23.862	62.184	84.813	1.00
	14.64								
40	ATOM	2075	ND2	ASN	446	23.418	61.909	86.978	1.00
	15.96								
	ATOM	2076	HD21	ASN	446	23.185	62.332	87.802	1.00
	0.00								
	ATOM	2077	HD22	ASN	446	23.635	60.964	86.897	1.00
	0.00								
45	ATOM	2078	C	ASN	446	22.986	66.304	84.875	1.00
	10.53								
	ATOM	2079	O	ASN	446	22.121	66.460	84.023	1.00
	10.29								
50	ATOM	2080	N	PRO	447	23.348	67.303	85.717	1.00
	11.41								
	ATOM	2081	CD	PRO	447	24.130	67.277	86.969	1.00
	11.07								
	ATOM	2082	CA	PRO	447	22.623	68.576	85.573	1.00
	11.37								
55	ATOM	2083	CB	PRO	447	23.188	69.426	86.729	1.00
	11.98								
	ATOM	2084	CG	PRO	447	23.475	68.401	87.765	1.00
	12.44								

5	ATOM 11.25	2085	C	PRO	447	22.917	69.197	84.199	1.00
	ATOM 10.58	2086	O	PRO	447	22.059	69.857	83.602	1.00
	ATOM 10.17	2087	N	GLU	448	24.130	69.009	83.690	1.00
	ATOM 0.00	2088	H	GLU	448	24.800	68.533	84.219	1.00
	ATOM 9.24	2089	CA	GLU	448	24.477	69.552	82.365	1.00
10	ATOM 9.39	2090	CB	GLU	448	25.978	69.405	82.046	1.00
	ATOM 12.36	2091	CG	GLU	448	26.812	70.398	82.851	1.00
	ATOM 14.85	2092	CD	GLU	448	28.303	70.227	82.678	1.00
15	ATOM 12.78	2093	OE1	GLU	448	28.849	69.096	82.698	1.00
	ATOM 18.02	2094	OE2	GLU	448	28.988	71.270	82.581	1.00
	ATOM 8.38	2095	C	GLU	448	23.670	68.859	81.257	1.00
20	ATOM 8.27	2096	O	GLU	448	23.216	69.499	80.322	1.00
	ATOM 7.49	2097	N	VAL	449	23.482	67.544	81.378	1.00
	ATOM 0.00	2098	H	VAL	449	23.883	67.055	82.131	1.00
25	ATOM 6.61	2099	CA	VAL	449	22.714	66.799	80.376	1.00
	ATOM 5.82	2100	CB	VAL	449	22.734	65.268	80.701	1.00
	ATOM 7.81	2101	CG1	VAL	449	21.720	64.527	79.865	1.00
30	ATOM 7.31	2102	CG2	VAL	449	24.134	64.734	80.451	1.00
	ATOM 5.47	2103	C	VAL	449	21.285	67.318	80.384	1.00
	ATOM 6.04	2104	O	VAL	449	20.748	67.638	79.333	1.00
35	ATOM 3.36	2105	N	ILE	450	20.725	67.486	81.573	0.60
	ATOM 0.00	2106	H	ILE	450	21.259	67.331	82.377	1.00
	ATOM 4.33	2107	CA	ILE	450	19.344	67.957	81.702	0.60
40	ATOM 4.13	2108	CB	ILE	450	18.921	67.934	83.180	0.60
	ATOM 4.27	2109	CG2	ILE	450	17.613	68.709	83.354	0.60
	ATOM 4.38	2110	CG1	ILE	450	18.739	66.471	83.617	0.60
45	ATOM 6.27	2111	CD1	ILE	450	18.559	66.309	85.109	0.60
	ATOM 5.04	2112	C	ILE	450	19.170	69.350	81.111	0.60
	ATOM 3.63	2113	O	ILE	450	18.260	69.601	80.309	0.60

	ATOM	2114	N	GLN	451	20.131	70.208	81.426	1.00
	7.77								
	ATOM	2115	H	GLN	451	20.861	69.891	82.002	1.00
	0.00								
5	ATOM	2116	CA	GLN	451	20.122	71.594	80.937	1.00
	10.54								
	ATOM	2117	CB	GLN	451	21.324	72.380	81.561	1.00
	14.15								
10	ATOM	2118	CG	GLN	451	21.528	73.883	81.175	1.00
	20.16								
	ATOM	2119	CD	GLN	451	22.760	74.552	81.885	1.00
	22.13								
	ATOM	2120	OE1	GLN	451	22.612	75.605	82.517	1.00
	26.32								
15	ATOM	2121	NE2	GLN	451	23.968	73.963	81.736	1.00
	25.19								
	ATOM	2122	HE21	GLN	451	24.064	73.148	81.192	1.00
	0.00								
	ATOM	2123	HE22	GLN	451	24.759	74.379	82.166	1.00
20	0.00								
	ATOM	2124	C	GLN	451	20.158	71.595	79.398	1.00
	10.44								
	ATOM	2125	O	GLN	451	19.349	72.280	78.730	1.00
	9.35								
25	ATOM	2126	N	ASN	452	21.048	70.798	78.815	1.00
	8.81								
	ATOM	2127	H	ASN	452	21.629	70.238	79.354	1.00
	0.00								
	ATOM	2128	CA	ASN	452	21.198	70.776	77.359	1.00
30	8.91								
	ATOM	2129	CB	ASN	452	22.408	69.915	76.974	1.00
	12.05								
	ATOM	2130	CG	ASN	452	23.700	70.670	76.921	1.00
	15.97								
35	ATOM	2131	OD1	ASN	452	24.703	70.170	76.339	1.00
	21.26								
	ATOM	2132	ND2	ASN	452	23.708	71.858	77.460	1.00
	16.96								
	ATOM	2133	HD21	ASN	452	22.903	72.231	77.860	1.00
40	0.00								
	ATOM	2134	HD22	ASN	452	24.554	72.362	77.417	1.00
	0.00								
	ATOM	2135	C	ASN	452	19.941	70.203	76.681	1.00
	7.97								
45	ATOM	2136	O	ASN	452	19.478	70.736	75.669	1.00
	7.99								
	ATOM	2137	N	LEU	453	19.412	69.105	77.224	1.00
	7.30								
	ATOM	2138	H	LEU	453	19.813	68.691	78.019	1.00
50	0.00								
	ATOM	2139	CA	LEU	453	18.236	68.533	76.635	1.00
	7.09								
	ATOM	2140	CB	LEU	453	17.793	67.274	77.383	1.00
	7.90								
55	ATOM	2141	CG	LEU	453	18.757	66.088	77.240	1.00
	7.82								
	ATOM	2142	CD1	LEU	453	18.258	64.959	78.206	1.00
	8.30								

	ATOM 6.41	2143	CD2	LEU	453	18.832	65.579	75.764	1.00
	ATOM 6.46	2144	C	LEU	453	17.110	69.560	76.580	1.00
5	ATOM 7.59	2145	O	LEU	453	16.336	69.581	75.624	1.00
	ATOM 7.77	2146	N	GLU	454	16.956	70.305	77.665	1.00
10	ATOM 0.00	2147	H	GLU	454	17.564	70.200	78.417	1.00
	ATOM 9.34	2148	CA	GLU	454	15.883	71.291	77.719	1.00
	ATOM 12.04	2149	CB	GLU	454	15.706	71.786	79.152	1.00
15	ATOM 17.04	2150	CG	GLU	454	15.054	70.656	79.968	1.00
	ATOM 21.47	2151	CD	GLU	454	14.908	70.931	81.436	1.00
20	ATOM 23.68	2152	OE1	GLU	454	15.423	71.959	81.918	1.00
	ATOM 22.13	2153	OE2	GLU	454	14.257	70.098	82.113	1.00
	ATOM 9.43	2154	C	GLU	454	16.008	72.408	76.729	1.00
25	ATOM 10.25	2155	O	GLU	454	14.988	73.045	76.413	1.00
	ATOM 8.46	2156	N	ARG	455	17.225	72.647	76.240	1.00
30	ATOM 0.00	2157	H	ARG	455	17.979	72.143	76.580	1.00
	ATOM 7.95	2158	CA	ARG	455	17.474	73.668	75.208	1.00
	ATOM 9.51	2159	CB	ARG	455	18.952	74.159	75.219	1.00
35	ATOM 11.91	2160	CG	ARG	455	19.395	74.768	76.525	1.00
	ATOM 12.88	2161	CD	ARG	455	20.827	75.305	76.457	1.00
40	ATOM 10.71	2162	NE	ARG	455	20.908	76.335	75.408	1.00
	ATOM 0.00	2163	HE	ARG	455	20.106	76.545	74.935	1.00
	ATOM 10.70	2164	CZ	ARG	455	22.038	76.973	75.060	1.00
45	ATOM 11.36	2165	NH1	ARG	455	23.215	76.666	75.617	1.00
	ATOM 0.00	2166	HH11	ARG	455	23.266	75.965	76.330	1.00
50	ATOM 0.00	2167	HH12	ARG	455	24.039	77.158	75.346	1.00
	ATOM 7.80	2168	NH2	ARG	455	21.945	78.048	74.293	1.00
	ATOM 0.00	2169	HH21	ARG	455	21.046	78.355	73.986	1.00
55	ATOM 0.00	2170	HH22	ARG	455	22.769	78.538	74.007	1.00
	ATOM 7.19	2171	C	ARG	455	17.179	73.119	73.811	1.00



	ATOM	2172	O	ARG	455	17.216	73.811	72.829	1.00
	7.14								
	ATOM	2173	N	GLY	456	16.969	71.797	73.694	1.00
	6.37								
5	ATOM	2174	H	GLY	456	16.986	71.232	74.489	1.00
	0.00								
	ATOM	2175	CA	GLY	456	16.732	71.194	72.404	1.00
	6.14								
10	ATOM	2176	C	GLY	456	17.969	70.497	71.856	1.00
	5.95								
	ATOM	2177	O	GLY	456	17.942	69.907	70.766	1.00
	7.78								
	ATOM	2178	N	TYR	457	19.042	70.542	72.619	1.00
	5.47								
15	ATOM	2179	H	TYR	457	19.023	71.005	73.485	1.00
	0.00								
	ATOM	2180	CA	TYR	457	20.256	69.856	72.151	1.00
	5.37								
20	ATOM	2181	CB	TYR	457	21.503	70.284	72.933	1.00
	5.38								
	ATOM	2182	CG	TYR	457	21.979	71.718	72.715	1.00
	6.50								
	ATOM	2183	CD1	TYR	457	21.495	72.490	71.683	1.00
	7.95								
25	ATOM	2184	CE1	TYR	457	21.991	73.794	71.454	1.00
	8.83								
	ATOM	2185	CD2	TYR	457	22.957	72.246	73.530	1.00
	8.19								
30	ATOM	2186	CE2	TYR	457	23.470	73.538	73.317	1.00
	9.65								
	ATOM	2187	CZ	TYR	457	22.980	74.293	72.276	1.00
	8.91								
	ATOM	2188	OH	TYR	457	23.541	75.554	72.010	1.00
	9.80								
35	ATOM	2189	HH	TYR	457	23.086	75.971	71.281	1.00
	0.00								
	ATOM	2190	C	TYR	457	20.098	68.387	72.439	1.00
	5.41								
40	ATOM	2191	O	TYR	457	19.297	68.006	73.292	1.00
	6.17								
	ATOM	2192	N	ARG	458	20.858	67.586	71.693	1.00
	4.55								
	ATOM	2193	H	ARG	458	21.374	67.973	70.938	1.00
	0.00								
45	ATOM	2194	CA	ARG	458	20.935	66.138	71.975	1.00
	4.84								
	ATOM	2195	CB	ARG	458	20.254	65.327	70.888	1.00
	3.99								
50	ATOM	2196	CG	ARG	458	18.701	65.543	70.874	1.00
	4.20								
	ATOM	2197	CD	ARG	458	18.037	65.155	72.167	1.00
	5.10								
	ATOM	2198	NE	ARG	458	16.566	65.315	72.102	1.00
	5.88								
55	ATOM	2199	HE	ARG	458	16.065	64.635	71.605	1.00
	0.00								
	ATOM	2200	CZ	ARG	458	15.875	66.325	72.647	1.00
	7.42								

	ATOM	2201	NH1	ARG	458	16.516	67.326	73.280	1.00
	7.90								
	ATOM	2202	HH11	ARG	458	17.507	67.309	73.327	1.00
	0.00								
5	ATOM	2203	HH12	ARG	458	15.995	68.070	73.677	1.00
	0.00								
	ATOM	2204	NH2	ARG	458	14.532	66.252	72.649	1.00
	7.34								
10	ATOM	2205	HH21	ARG	458	14.066	65.468	72.248	1.00
	0.00								
	ATOM	2206	HH22	ARG	458	13.996	66.998	73.052	1.00
	0.00								
	ATOM	2207	C	ARG	458	22.412	65.805	72.031	1.00
	6.43								
15	ATOM	2208	O	ARG	458	23.290	66.676	71.861	1.00
	7.40								
	ATOM	2209	N	MET	459	22.712	64.543	72.353	1.00
	5.51								
20	ATOM	2210	H	MET	459	22.005	63.887	72.532	1.00
	0.00								
	ATOM	2211	CA	MET	459	24.111	64.152	72.485	1.00
	5.95								
	ATOM	2212	CB	MET	459	24.216	62.643	72.743	1.00
	6.59								
25	ATOM	2213	CG	MET	459	25.571	62.339	73.338	1.00
	7.84								
	ATOM	2214	SD	MET	459	25.818	60.536	73.560	1.00
	6.28								
30	ATOM	2215	CE	MET	459	24.337	60.011	74.326	1.00
	6.82								
	ATOM	2216	C	MET	459	24.932	64.502	71.235	1.00
	5.23								
	ATOM	2217	O	MET	459	24.508	64.251	70.107	1.00
	5.48								
35	ATOM	2218	N	VAL	460	26.145	65.055	71.436	1.00
	5.55								
	ATOM	2219	H	VAL	460	26.446	65.223	72.340	1.00
	0.00								
40	ATOM	2220	CA	VAL	460	27.027	65.394	70.348	1.00
	7.12								
	ATOM	2221	CB	VAL	460	28.303	66.024	70.947	1.00
	7.96								
	ATOM	2222	CG1	VAL	460	29.437	66.112	69.917	1.00
	9.36								
45	ATOM	2223	CG2	VAL	460	27.916	67.395	71.546	1.00
	9.72								
	ATOM	2224	C	VAL	460	27.385	64.139	69.536	1.00
	6.92								
50	ATOM	2225	O	VAL	460	27.514	63.072	70.135	1.00
	7.43								
	ATOM	2226	N	ARG	461	27.522	64.250	68.228	1.00
	7.25								
	ATOM	2227	H	ARG	461	27.347	65.105	67.790	1.00
	0.00								
55	ATOM	2228	CA	ARG	461	27.914	63.079	67.409	1.00
	6.83								
	ATOM	2229	CB	ARG	461	28.282	63.474	65.983	1.00
	7.15								

	ATOM	2230	CG	ARG	461	27.117	64.029	65.198	1.00
	7.70								
	ATOM	2231	CD	ARG	461	27.573	64.576	63.843	1.00
	8.56								
5	ATOM	2232	NE	ARG	461	26.394	64.870	63.034	1.00
	8.40								
	ATOM	2233	HE	ARG	461	26.059	64.166	62.465	1.00
	0.00								
10	ATOM	2234	CZ	ARG	461	25.742	66.033	63.030	1.00
	9.86								
	ATOM	2235	NH1	ARG	461	26.151	67.061	63.803	1.00
	8.75								
	ATOM	2236	HH11	ARG	461	26.936	66.957	64.397	1.00
	0.00								
15	ATOM	2237	HH12	ARG	461	25.636	67.921	63.781	1.00
	0.00								
	ATOM	2238	NH2	ARG	461	24.679	66.147	62.247	1.00
	7.82								
	ATOM	2239	HH21	ARG	461	24.374	65.365	61.712	1.00
	0.00								
20	ATOM	2240	HH22	ARG	461	24.153	67.001	62.230	1.00
	0.00								
	ATOM	2241	C	ARG	461	29.138	62.381	67.997	1.00
	8.87								
25	ATOM	2242	O	ARG	461	30.209	63.004	68.196	1.00
	9.79								
	ATOM	2243	N	PRO	462	28.978	61.082	68.311	1.00
	9.26								
30	ATOM	2244	CD	PRO	462	27.722	60.309	68.426	1.00
	9.57								
	ATOM	2245	CA	PRO	462	30.114	60.354	68.863	1.00
	11.18								
	ATOM	2246	CB	PRO	462	29.536	58.948	69.103	1.00
	9.51								
35	ATOM	2247	CG	PRO	462	28.094	59.166	69.361	1.00
	9.93								
	ATOM	2248	C	PRO	462	31.183	60.273	67.811	1.00
	12.44								
40	ATOM	2249	O	PRO	462	30.902	60.304	66.613	1.00
	12.97								
	ATOM	2250	N	ASP	463	32.429	60.068	68.249	1.00
	15.65								
	ATOM	2251	H	ASP	463	32.611	60.028	69.194	1.00
	0.00								
45	ATOM	2252	CA	ASP	463	33.527	59.896	67.309	1.00
	17.53								
	ATOM	2253	CB	ASP	463	34.846	59.645	68.056	1.00
	19.87								
	ATOM	2254	CG	ASP	463	35.394	60.883	68.735	1.00
	22.64								
50	ATOM	2255	OD1	ASP	463	35.069	62.011	68.287	1.00
	26.57								
	ATOM	2256	OD2	ASP	463	36.183	60.725	69.700	1.00
	24.80								
55	ATOM	2257	C	ASP	463	33.272	58.684	66.423	1.00
	17.79								
	ATOM	2258	O	ASP	463	32.783	57.645	66.910	1.00
	18.57								

	ATOM	2259	N	ASN	464	33.566	58.856	65.134	1.00
	18.96								
	ATOM	2260	H	ASN	464	33.918	59.727	64.850	1.00
	0.00								
5	ATOM	2261	CA	ASN	464	33.426	57.827	64.104	1.00
	19.94								
	ATOM	2262	CB	ASN	464	34.480	56.729	64.287	1.00
	23.16								
10	ATOM	2263	CG	ASN	464	35.902	57.252	64.087	1.00
	25.19								
	ATOM	2264	OD1	ASN	464	36.188	57.958	63.115	1.00
	27.59								
	ATOM	2265	ND2	ASN	464	36.778	56.955	65.040	1.00
	26.98								
15	ATOM	2266	HD21	ASN	464	36.514	56.437	65.809	1.00
	0.00								
	ATOM	2267	HD22	ASN	464	37.700	57.286	64.893	1.00
	0.00								
	ATOM	2268	C	ASN	464	32.055	57.184	63.998	1.00
20	18.39								
	ATOM	2269	O	ASN	464	31.927	56.007	63.639	1.00
	20.77								
	ATOM	2270	N	CYS	465	31.017	57.920	64.342	1.00
	16.37								
25	ATOM	2271	H	CYS	465	31.151	58.841	64.656	1.00
	0.00								
	ATOM	2272	CA	CYS	465	29.660	57.352	64.245	1.00
	14.87								
	ATOM	2273	CB	CYS	465	28.795	58.006	65.308	1.00
30	14.20								
	ATOM	2274	SG	CYS	465	27.051	57.500	65.248	1.00
	12.65								
	ATOM	2275	C	CYS	465	29.094	57.673	62.862	1.00
	12.49								
35	ATOM	2276	O	CYS	465	29.113	58.835	62.446	1.00
	12.65								
	ATOM	2277	N	PRO	466	28.636	56.667	62.104	1.00
	10.32								
	ATOM	2278	CD	PRO	466	28.670	55.217	62.425	1.00
40	11.10								
	ATOM	2279	CA	PRO	466	28.073	56.921	60.769	1.00
	9.39								
	ATOM	2280	CB	PRO	466	27.566	55.548	60.319	1.00
	10.25								
45	ATOM	2281	CG	PRO	466	28.404	54.572	61.124	1.00
	11.42								
	ATOM	2282	C	PRO	466	26.876	57.881	60.925	1.00
	7.58								
	ATOM	2283	O	PRO	466	26.055	57.733	61.851	1.00
50	7.26								
	ATOM	2284	N	GLU	467	26.727	58.807	59.975	1.00
	6.68								
	ATOM	2285	H	GLU	467	27.343	58.848	59.215	1.00
	0.00								
55	ATOM	2286	CA	GLU	467	25.652	59.781	60.100	1.00
	6.04								
	ATOM	2287	CB	GLU	467	25.895	60.930	59.126	1.00
	5.93								

	ATOM	2288	CG	GLU	467	24.827	62.033	59.276	1.00
	7.61								
	ATOM	2289	CD	GLU	467	24.949	62.858	60.537	1.00
	7.58								
5	ATOM	2290	OE1	GLU	467	25.929	62.714	61.289	1.00
	8.06								
	ATOM	2291	OE2	GLU	467	24.022	63.691	60.784	1.00
	7.05								
10	ATOM	2292	C	GLU	467	24.261	59.174	59.995	1.00
	5.22								
	ATOM	2293	O	GLU	467	23.327	59.674	60.653	1.00
	5.02								
	ATOM	2294	N	GLU	468	24.119	58.100	59.226	0.51
	2.00								
15	ATOM	2295	H	GLU	468	24.876	57.757	58.725	1.00
	0.00								
	ATOM	2296	CA	GLU	468	22.823	57.436	59.143	0.51
	2.00								
20	ATOM	2297	CB	GLU	468	22.889	56.272	58.182	0.51
	2.00								
	ATOM	2298	CG	GLU	468	23.077	56.743	56.747	0.51
	2.53								
	ATOM	2299	CD	GLU	468	23.460	55.601	55.829	0.51
	6.33								
25	ATOM	2300	OE1	GLU	468	22.553	55.026	55.176	0.51
	7.50								
	ATOM	2301	OE2	GLU	468	24.668	55.272	55.768	0.51
	8.25								
30	ATOM	2302	C	GLU	468	22.452	56.912	60.520	0.51
	2.00								
	ATOM	2303	O	GLU	468	21.306	56.997	60.953	0.51
	2.00								
	ATOM	2304	N	LEU	469	23.427	56.345	61.216	1.00
	4.24								
35	ATOM	2305	H	LEU	469	24.316	56.216	60.836	1.00
	0.00								
	ATOM	2306	CA	LEU	469	23.123	55.853	62.550	1.00
	3.84								
40	ATOM	2307	CB	LEU	469	24.277	54.993	63.132	1.00
	5.93								
	ATOM	2308	CG	LEU	469	23.972	54.287	64.459	1.00
	7.66								
	ATOM	2309	CD1	LEU	469	22.900	53.229	64.290	1.00
	8.35								
45	ATOM	2310	CD2	LEU	469	25.272	53.663	64.991	1.00
	10.08								
	ATOM	2311	C	LEU	469	22.788	57.015	63.497	1.00
	4.40								
50	ATOM	2312	O	LEU	469	21.912	56.929	64.358	1.00
	4.94								
	ATOM	2313	N	TYR	470	23.556	58.113	63.385	1.00
	4.82								
	ATOM	2314	H	TYR	470	24.279	58.161	62.740	1.00
	0.00								
55	ATOM	2315	CA	TYR	470	23.277	59.233	64.255	1.00
	4.69								
	ATOM	2316	CB	TYR	470	24.308	60.364	64.027	1.00
	3.97								

	ATOM 3.57	2317	CG	TYR	470	24.156	61.525	65.000	1.00
	ATOM 3.84	2318	CD1	TYR	470	24.403	61.380	66.367	1.00
5	ATOM 3.35	2319	CE1	TYR	470	24.266	62.422	67.261	1.00
	ATOM 5.04	2320	CD2	TYR	470	23.773	62.770	64.530	1.00
10	ATOM 4.10	2321	CE2	TYR	470	23.674	63.836	65.403	1.00
	ATOM 3.47	2322	CZ	TYR	470	23.904	63.667	66.753	1.00
	ATOM 6.32	2323	OH	TYR	470	23.784	64.737	67.628	1.00
15	ATOM 0.00	2324	HH	TYR	470	23.979	64.406	68.492	1.00
	ATOM 4.18	2325	C	TYR	470	21.862	59.774	64.035	1.00
20	ATOM 4.33	2326	O	TYR	470	21.175	60.125	65.030	1.00
	ATOM 4.39	2327	N	GLN	471	21.427	59.837	62.764	1.00
	ATOM 0.00	2328	H	GLN	471	22.002	59.548	62.038	1.00
25	ATOM 4.56	2329	CA	GLN	471	20.064	60.350	62.500	1.00
	ATOM 5.08	2330	CB	GLN	471	19.868	60.703	61.031	1.00
30	ATOM 5.28	2331	CG	GLN	471	20.684	61.947	60.624	1.00
	ATOM 7.09	2332	CD	GLN	471	20.329	63.136	61.492	1.00
	ATOM 8.12	2333	OE1	GLN	471	19.153	63.352	61.824	1.00
35	ATOM 6.37	2334	NE2	GLN	471	21.326	63.940	61.856	1.00
	ATOM 0.00	2335	HE21	GLN	471	22.236	63.743	61.584	1.00
40	ATOM 0.00	2336	HE22	GLN	471	21.094	64.701	62.429	1.00
	ATOM 4.46	2337	C	GLN	471	18.995	59.350	63.008	1.00
	ATOM 6.58	2338	O	GLN	471	17.929	59.765	63.467	1.00
45	ATOM 5.67	2339	N	LEU	472	19.363	58.068	63.149	1.00
	ATOM 0.00	2340	H	LEU	472	20.238	57.765	62.845	1.00
50	ATOM 5.59	2341	CA	LEU	472	18.422	57.112	63.733	1.00
	ATOM 5.95	2342	CB	LEU	472	18.847	55.677	63.423	1.00
	ATOM 6.17	2343	CG	LEU	472	17.776	54.626	63.714	1.00
55	ATOM 8.40	2344	CD1	LEU	472	16.699	54.732	62.640	1.00
	ATOM 7.32	2345	CD2	LEU	472	18.425	53.239	63.565	1.00

	ATOM 6.10	2346	C	LEU	472	18.308	57.355	65.255	1.00
	ATOM 6.53	2347	O	LEU	472	17.237	57.324	65.846	1.00
5	ATOM 5.16	2348	N	MET	473	19.454	57.647	65.908	1.00
	ATOM 0.00	2349	H	MET	473	20.292	57.622	65.404	1.00
10	ATOM 5.13	2350	CA	MET	473	19.473	57.983	67.329	1.00
	ATOM 5.60	2351	CB	MET	473	20.885	58.393	67.728	1.00
	ATOM 5.38	2352	CG	MET	473	21.865	57.162	67.626	1.00
15	ATOM 6.95	2353	SD	MET	473	23.566	57.901	67.861	1.00
	ATOM 7.19	2354	CE	MET	473	24.589	56.334	67.713	1.00
20	ATOM 5.07	2355	C	MET	473	18.596	59.224	67.515	1.00
	ATOM 6.08	2356	O	MET	473	17.830	59.288	68.461	1.00
	ATOM 5.56	2357	N	ARG	474	18.714	60.186	66.610	1.00
25	ATOM 0.00	2358	H	ARG	474	19.307	60.071	65.829	1.00
	ATOM 5.66	2359	CA	ARG	474	17.907	61.417	66.799	1.00
30	ATOM 6.55	2360	CB	ARG	474	18.252	62.482	65.731	1.00
	ATOM 8.15	2361	CG	ARG	474	19.756	62.944	65.715	1.00
	ATOM 11.29	2362	CD	ARG	474	20.197	63.546	66.969	1.00
35	ATOM 13.35	2363	NE	ARG	474	19.469	64.769	67.278	1.00
	ATOM 0.00	2364	HE	ARG	474	18.501	64.719	67.298	1.00
40	ATOM 12.24	2365	CZ	ARG	474	20.030	65.955	67.498	1.00
	ATOM 8.11	2366	NH1	ARG	474	21.344	66.132	67.458	1.00
	ATOM 0.00	2367	HH11	ARG	474	21.955	65.352	67.277	1.00
45	ATOM 0.00	2368	HH12	ARG	474	21.745	67.030	67.635	1.00
	ATOM 12.65	2369	NH2	ARG	474	19.228	66.976	67.757	1.00
50	ATOM 0.00	2370	HH21	ARG	474	18.246	66.849	67.753	1.00
	ATOM 0.00	2371	HH22	ARG	474	19.620	67.890	67.906	1.00
	ATOM 5.28	2372	C	ARG	474	16.414	61.120	66.772	1.00
55	ATOM 7.28	2373	O	ARG	474	15.660	61.789	67.458	1.00
	ATOM 6.18	2374	N	LEU	475	15.973	60.176	65.937	1.00

	ATOM	2375	H	LEU	475	16.599	59.687	65.358	1.00
	0.00								
	ATOM	2376	CA	LEU	475	14.535	59.833	65.918	1.00
	5.65								
5	ATOM	2377	CB	LEU	475	14.200	58.769	64.881	1.00
	6.32								
	ATOM	2378	CG	LEU	475	14.438	59.049	63.423	1.00
	8.27								
	ATOM	2379	CD1	LEU	475	13.828	57.856	62.657	1.00
10	10.34								
	ATOM	2380	CD2	LEU	475	13.761	60.340	63.023	1.00
	10.06								
	ATOM	2381	C	LEU	475	14.119	59.292	67.288	1.00
	5.61								
15	ATOM	2382	O	LEU	475	13.021	59.578	67.798	1.00
	6.38								
	ATOM	2383	N	CYS	476	15.010	58.527	67.943	1.00
	5.04								
	ATOM	2384	H	CYS	476	15.872	58.323	67.538	1.00
20	0.00								
	ATOM	2385	CA	CYS	476	14.713	58.010	69.254	1.00
	5.25								
	ATOM	2386	CB	CYS	476	15.827	57.034	69.670	1.00
	4.89								
25	ATOM	2387	SG	CYS	476	15.962	55.582	68.654	1.00
	6.23								
	ATOM	2388	C	CYS	476	14.630	59.049	70.342	1.00
	4.66								
	ATOM	2389	O	CYS	476	14.104	58.817	71.416	1.00
30	5.91								
	ATOM	2390	N	TRP	477	15.206	60.242	70.047	1.00
	5.78								
	ATOM	2391	H	TRP	477	15.588	60.396	69.164	1.00
	0.00								
35	ATOM	2392	CA	TRP	477	15.261	61.296	71.025	1.00
	5.87								
	ATOM	2393	CB	TRP	477	16.698	61.833	71.190	1.00
	5.33								
	ATOM	2394	CG	TRP	477	17.736	60.770	71.568	1.00
40	4.82								
	ATOM	2395	CD2	TRP	477	19.102	60.778	71.165	1.00
	3.86								
	ATOM	2396	CE2	TRP	477	19.728	59.628	71.752	1.00
	5.21								
45	ATOM	2397	CE3	TRP	477	19.871	61.642	70.361	1.00
	4.16								
	ATOM	2398	CD1	TRP	477	17.567	59.667	72.375	1.00
	6.46								
	ATOM	2399	NE1	TRP	477	18.785	58.969	72.482	1.00
50	4.91								
	ATOM	2400	HE1	TRP	477	18.921	58.155	72.996	1.00
	0.00								
	ATOM	2401	CZ2	TRP	477	21.074	59.336	71.537	1.00
	5.82								
55	ATOM	2402	CZ3	TRP	477	21.208	61.341	70.157	1.00
	4.59								
	ATOM	2403	CH2	TRP	477	21.786	60.209	70.741	1.00
	4.52								



	ATOM	2404	C	TRP	477	14.331	62.432	70.728	1.00
	7.18								
	ATOM	2405	O	TRP	477	14.519	63.536	71.231	1.00
	7.39								
5	ATOM	2406	N	LYS	478	13.291	62.161	69.961	1.00
	6.00								
	ATOM	2407	H	LYS	478	13.180	61.274	69.565	1.00
	0.00								
10	ATOM	2408	CA	LYS	478	12.319	63.219	69.699	1.00
	7.56								
	ATOM	2409	CB	LYS	478	11.293	62.731	68.679	1.00
	8.32								
	ATOM	2410	CG	LYS	478	11.869	62.775	67.273	1.00
	11.04								
15	ATOM	2411	CD	LYS	478	10.927	62.299	66.234	1.00
	14.78								
	ATOM	2412	CE	LYS	478	11.498	62.526	64.861	1.00
	18.29								
	ATOM	2413	NZ	LYS	478	11.628	63.969	64.509	1.00
20	22.77								
	ATOM	2414	HZ1	LYS	478	12.253	64.432	65.196	1.00
	0.00								
	ATOM	2415	HZ2	LYS	478	10.681	64.413	64.558	1.00
	0.00								
25	ATOM	2416	HZ3	LYS	478	12.006	64.064	63.555	1.00
	0.00								
	ATOM	2417	C	LYS	478	11.656	63.610	71.016	1.00
	7.86								
	ATOM	2418	O	LYS	478	11.472	62.794	71.946	1.00
30	8.45								
	ATOM	2419	N	GLU	479	11.250	64.887	71.091	1.00
	9.37								
	ATOM	2420	H	GLU	479	11.344	65.484	70.316	1.00
	0.00								
35	ATOM	2421	CA	GLU	479	10.683	65.403	72.316	1.00
	10.56								
	ATOM	2422	CB	GLU	479	10.367	66.888	72.128	1.00
	14.56								
	ATOM	2423	CG	GLU	479	9.793	67.492	73.360	1.00
40	18.93								
	ATOM	2424	CD	GLU	479	10.841	67.919	74.321	1.00
	22.09								
	ATOM	2425	OE1	GLU	479	12.025	67.617	74.055	1.00
	23.23								
45	ATOM	2426	OE2	GLU	479	10.513	68.633	75.277	1.00
	23.63								
	ATOM	2427	C	GLU	479	9.395	64.709	72.746	1.00
	9.17								
	ATOM	2428	O	GLU	479	9.262	64.285	73.901	1.00
50	10.60								
	ATOM	2429	N	ARG	480	8.468	64.584	71.810	1.00
	9.87								
	ATOM	2430	H	ARG	480	8.630	64.905	70.894	1.00
	0.00								
55	ATOM	2431	CA	ARG	480	7.183	63.956	72.149	1.00
	10.88								
	ATOM	2432	CB	ARG	480	6.074	64.402	71.184	1.00
	12.98								

	ATOM	2433	CG	ARG	480	5.722	65.877	71.254	1.00
	17.39								
	ATOM	2434	CD	ARG	480	4.329	66.122	70.639	1.00
	20.06								
5	ATOM	2435	NE	ARG	480	4.354	65.998	69.186	1.00
	24.35								
	ATOM	2436	HE	ARG	480	5.190	66.232	68.740	1.00
	0.00								
10	ATOM	2437	CZ	ARG	480	3.316	65.616	68.436	1.00
	24.98								
	ATOM	2438	NH1	ARG	480	2.159	65.308	69.002	1.00
	28.47								
	ATOM	2439	HH11	ARG	480	2.071	65.319	69.990	1.00
	0.00								
15	ATOM	2440	HH12	ARG	480	1.396	65.000	68.429	1.00
	0.00								
	ATOM	2441	NH2	ARG	480	3.427	65.577	67.109	1.00
	27.22								
20	ATOM	2442	HH21	ARG	480	4.294	65.855	66.672	1.00
	0.00								
	ATOM	2443	HH22	ARG	480	2.657	65.305	66.549	1.00
	0.00								
	ATOM	2444	C	ARG	480	7.347	62.458	72.013	1.00
	9.30								
25	ATOM	2445	O	ARG	480	7.697	62.010	70.935	1.00
	10.00								
	ATOM	2446	N	PRO	481	7.033	61.699	73.085	1.00
	9.78								
30	ATOM	2447	CD	PRO	481	6.681	62.127	74.445	1.00
	9.93								
	ATOM	2448	CA	PRO	481	7.161	60.240	73.019	1.00
	9.85								
	ATOM	2449	CB	PRO	481	6.537	59.798	74.332	1.00
	9.97								
35	ATOM	2450	CG	PRO	481	6.910	60.886	75.309	1.00
	11.62								
	ATOM	2451	C	PRO	481	6.450	59.638	71.819	1.00
	10.02								
40	ATOM	2452	O	PRO	481	7.016	58.825	71.071	1.00
	10.13								
	ATOM	2453	N	GLU	482	5.238	60.133	71.512	1.00
	10.63								
	ATOM	2454	H	GLU	482	4.858	60.861	72.027	1.00
	0.00								
45	ATOM	2455	CA	GLU	482	4.530	59.558	70.391	1.00
	12.13								
	ATOM	2456	CB	GLU	482	3.077	60.045	70.404	1.00
	14.96								
50	ATOM	2457	CG	GLU	482	2.985	61.559	70.151	1.00
	19.14								
	ATOM	2458	CD	GLU	482	2.948	62.440	71.417	1.00
	21.01								
	ATOM	2459	OE1	GLU	482	3.424	62.066	72.556	1.00
	19.96								
55	ATOM	2460	OE2	GLU	482	2.392	63.564	71.233	1.00
	24.17								
	ATOM	2461	C	GLU	482	5.175	59.758	69.003	1.00
	10.16								

	ATOM 11.74	2462	O	GLU	482	4.799	59.108	68.013	1.00
	ATOM 9.21	2463	N	ASP	483	6.164	60.663	68.908	1.00
5	ATOM 0.00	2464	H	ASP	483	6.436	61.169	69.691	1.00
	ATOM 8.77	2465	CA	ASP	483	6.832	60.905	67.639	1.00
10	ATOM 10.30	2466	CB	ASP	483	7.347	62.347	67.567	1.00
	ATOM 15.55	2467	CG	ASP	483	6.213	63.361	67.401	1.00
	ATOM 16.29	2468	OD1	ASP	483	5.094	62.959	66.996	1.00
15	ATOM 15.87	2469	OD2	ASP	483	6.475	64.534	67.686	1.00
	ATOM 7.47	2470	C	ASP	483	8.040	59.997	67.451	1.00
20	ATOM 9.55	2471	O	ASP	483	8.606	59.932	66.358	1.00
	ATOM 7.27	2472	N	ARG	484	8.425	59.305	68.515	1.00
	ATOM 0.00	2473	H	ARG	484	7.950	59.432	69.358	1.00
25	ATOM 6.37	2474	CA	ARG	484	9.563	58.371	68.435	1.00
	ATOM 5.61	2475	CB	ARG	484	10.038	58.016	69.835	1.00
30	ATOM 4.50	2476	CG	ARG	484	10.575	59.269	70.629	1.00
	ATOM 5.79	2477	CD	ARG	484	10.822	58.932	72.045	1.00
	ATOM 5.54	2478	NE	ARG	484	10.947	60.178	72.835	1.00
35	ATOM 0.00	2479	HE	ARG	484	11.163	60.995	72.370	1.00
	ATOM 5.68	2480	CZ	ARG	484	10.745	60.237	74.143	1.00
40	ATOM 6.19	2481	NH1	ARG	484	10.435	59.130	74.890	1.00
	ATOM 0.00	2482	HH11	ARG	484	10.371	58.237	74.458	1.00
	ATOM 0.00	2483	HH12	ARG	484	10.304	59.233	75.870	1.00
45	ATOM 7.29	2484	NH2	ARG	484	10.650	61.435	74.772	1.00
	ATOM 0.00	2485	HH21	ARG	484	10.726	62.276	74.240	1.00
50	ATOM 0.00	2486	HH22	ARG	484	10.493	61.474	75.752	1.00
	ATOM 7.83	2487	C	ARG	484	9.104	57.124	67.686	1.00
	ATOM 8.21	2488	O	ARG	484	7.936	56.779	67.773	1.00
55	ATOM 6.56	2489	N	PRO	485	10.004	56.458	66.979	1.00
	ATOM 6.14	2490	CD	PRO	485	11.455	56.804	66.892	1.00

5	ATOM 6.48	2491	CA	PRO	485	9.683	55.261	66.200	1.00
	ATOM 6.21	2492	CB	PRO	485	10.958	55.027	65.380	1.00
	ATOM 7.95	2493	CG	PRO	485	12.025	55.560	66.251	1.00
10	ATOM 5.48	2494	C	PRO	485	9.340	54.053	67.049	1.00
	ATOM 6.38	2495	O	PRO	485	9.614	53.999	68.235	1.00
	ATOM 6.76	2496	N	THR	486	8.778	53.043	66.388	1.00
15	ATOM 0.00	2497	H	THR	486	8.538	53.159	65.454	1.00
	ATOM 6.58	2498	CA	THR	486	8.559	51.775	67.079	1.00
	ATOM 6.34	2499	CB	THR	486	7.460	50.938	66.370	1.00
20	ATOM 7.89	2500	OG1	THR	486	7.845	50.658	65.023	1.00
	ATOM 0.00	2501	HG1	THR	486	7.170	50.128	64.615	1.00
	ATOM 8.28	2502	CG2	THR	486	6.101	51.770	66.358	1.00
25	ATOM 6.42	2503	C	THR	486	9.829	50.953	66.980	1.00
	ATOM 6.53	2504	O	THR	486	10.691	51.202	66.128	1.00
	ATOM 5.71	2505	N	PHE	487	9.930	49.972	67.874	1.00
30	ATOM 0.00	2506	H	PHE	487	9.256	49.869	68.553	1.00
	ATOM 5.66	2507	CA	PHE	487	11.060	49.050	67.789	1.00
	ATOM 4.55	2508	CB	PHE	487	11.128	48.163	69.039	1.00
35	ATOM 3.64	2509	CG	PHE	487	11.765	48.852	70.218	1.00
	ATOM 4.58	2510	CD1	PHE	487	13.134	49.166	70.178	1.00
	ATOM 3.94	2511	CD2	PHE	487	11.025	49.199	71.350	1.00
40	ATOM 4.13	2512	CE1	PHE	487	13.733	49.807	71.249	1.00
	ATOM 5.88	2513	CE2	PHE	487	11.600	49.828	72.408	1.00
	ATOM 4.40	2514	CZ	PHE	487	12.994	50.142	72.366	1.00
45	ATOM 6.80	2515	C	PHE	487	11.024	48.228	66.506	1.00
	ATOM 6.89	2516	O	PHE	487	12.080	47.846	65.983	1.00
	ATOM 7.35	2517	N	ASP	488	9.826	47.889	65.997	1.00
50	ATOM 0.00	2518	H	ASP	488	8.984	48.104	66.451	1.00
	ATOM 9.30	2519	CA	ASP	488	9.836	47.177	64.727	1.00

	ATOM	2520	CB	ASP	488	8.457	46.691	64.300	1.00
	13.59								
	ATOM	2521	CG	ASP	488	8.569	45.639	63.185	1.00
	18.00								
5	ATOM	2522	OD1	ASP	488	9.061	44.531	63.478	1.00
	20.71								
	ATOM	2523	OD2	ASP	488	8.328	45.959	62.005	1.00
	23.96								
10	ATOM	2524	C	ASP	488	10.447	48.019	63.607	1.00
	7.89								
	ATOM	2525	O	ASP	488	11.202	47.492	62.801	1.00
	8.16								
	ATOM	2526	N	TYR	489	10.154	49.338	63.599	1.00
	6.57								
15	ATOM	2527	H	TYR	489	9.501	49.680	64.240	1.00
	0.00								
	ATOM	2528	CA	TYR	489	10.753	50.238	62.630	1.00
	6.51								
20	ATOM	2529	CB	TYR	489	10.198	51.661	62.797	1.00
	5.83								
	ATOM	2530	CG	TYR	489	10.831	52.678	61.888	1.00
	7.48								
	ATOM	2531	CD1	TYR	489	10.412	52.820	60.575	1.00
	8.56								
25	ATOM	2532	CE1	TYR	489	11.020	53.729	59.724	1.00
	10.01								
	ATOM	2533	CD2	TYR	489	11.898	53.460	62.347	1.00
	6.56								
30	ATOM	2534	CE2	TYR	489	12.525	54.343	61.495	1.00
	7.31								
	ATOM	2535	CZ	TYR	489	12.076	54.476	60.202	1.00
	9.98								
	ATOM	2536	OH	TYR	489	12.677	55.392	59.366	1.00
	11.46								
35	ATOM	2537	HH	TYR	489	13.355	55.856	59.850	1.00
	0.00								
	ATOM	2538	C	TYR	489	12.267	50.272	62.801	1.00
	5.92								
40	ATOM	2539	O	TYR	489	12.995	50.092	61.839	1.00
	7.10								
	ATOM	2540	N	LEU	490	12.718	50.436	64.038	1.00
	6.65								
	ATOM	2541	H	LEU	490	12.092	50.501	64.777	1.00
	0.00								
45	ATOM	2542	CA	LEU	490	14.165	50.492	64.347	1.00
	6.42								
	ATOM	2543	CB	LEU	490	14.388	50.731	65.870	1.00
	5.79								
50	ATOM	2544	CG	LEU	490	13.989	52.132	66.373	1.00
	7.48								
	ATOM	2545	CD1	LEU	490	13.931	52.235	67.878	1.00
	6.61								
	ATOM	2546	CD2	LEU	490	15.056	53.105	65.797	1.00
	8.80								
55	ATOM	2547	C	LEU	490	14.860	49.211	63.880	1.00
	6.18								
	ATOM	2548	O	LEU	490	15.892	49.243	63.238	1.00
	5.96								

	ATOM	2549	N	ARG	491	14.233	48.060	64.160	1.00
	6.27								
	ATOM	2550	H	ARG	491	13.411	48.069	64.673	1.00
	0.00								
5	ATOM	2551	CA	ARG	491	14.815	46.795	63.721	1.00
	6.31								
	ATOM	2552	CB	ARG	491	13.915	45.641	64.183	1.00
	7.38								
10	ATOM	2553	CG	ARG	491	14.470	44.283	63.688	1.00
	9.31								
	ATOM	2554	CD	ARG	491	13.393	43.170	63.645	1.00
	14.23								
	ATOM	2555	NE	ARG	491	12.172	43.598	62.930	1.00
	15.07								
15	ATOM	2556	HE	ARG	491	11.401	43.829	63.489	1.00
	0.00								
	ATOM	2557	CZ	ARG	491	12.018	43.712	61.608	1.00
	15.75								
20	ATOM	2558	NH1	ARG	491	12.982	43.434	60.746	1.00
	15.02								
	ATOM	2559	HH11	ARG	491	13.880	43.121	61.087	1.00
	0.00								
	ATOM	2560	HH12	ARG	491	12.829	43.535	59.774	1.00
	0.00								
25	ATOM	2561	NH2	ARG	491	10.865	44.169	61.137	1.00
	15.21								
	ATOM	2562	HH21	ARG	491	10.135	44.416	61.771	1.00
	0.00								
30	ATOM	2563	HH22	ARG	491	10.729	44.265	60.152	1.00
	0.00								
	ATOM	2564	C	ARG	491	14.932	46.739	62.189	1.00
	6.75								
	ATOM	2565	O	ARG	491	15.992	46.361	61.634	1.00
	7.35								
35	ATOM	2566	N	SER	492	13.879	47.186	61.492	0.71
	4.54								
	ATOM	2567	H	SER	492	13.089	47.538	61.958	1.00
	0.00								
40	ATOM	2568	CA	SER	492	13.880	47.133	60.055	0.71
	5.30								
	ATOM	2569	CB	SER	492	12.496	47.529	59.526	0.71
	5.43								
	ATOM	2570	OG	SER	492	12.474	47.374	58.129	0.71
	9.15								
45	ATOM	2571	HG	SER	492	13.145	47.949	57.762	1.00
	0.00								
	ATOM	2572	C	SER	492	14.962	48.008	59.439	0.71
	4.32								
50	ATOM	2573	O	SER	492	15.671	47.594	58.533	0.71
	4.97								
	ATOM	2574	N	VAL	493	15.139	49.218	59.983	1.00
	5.16								
	ATOM	2575	H	VAL	493	14.553	49.500	60.718	1.00
	0.00								
55	ATOM	2576	CA	VAL	493	16.138	50.119	59.443	1.00
	6.43								
	ATOM	2577	CB	VAL	493	15.980	51.550	60.107	1.00
	5.63								

5	ATOM 8.00	2578	CG1 VAL	493	17.159	52.455	59.652	1.00
	ATOM 7.88	2579	CG2 VAL	493	14.634	52.189	59.690	1.00
	ATOM 5.20	2580	C VAL	493	17.516	49.591	59.737	1.00
	ATOM 6.67	2581	O VAL	493	18.353	49.604	58.870	1.00
10	ATOM 5.50	2582	N LEU	494	17.745	49.116	60.958	1.00
	ATOM 0.00	2583	H LEU	494	17.027	49.146	61.624	1.00
	ATOM 6.34	2584	CA LEU	494	19.094	48.609	61.333	1.00
	ATOM 6.35	2585	CB LEU	494	19.145	48.289	62.805	1.00
15	ATOM 5.07	2586	CG LEU	494	19.171	49.514	63.713	1.00
	ATOM 5.78	2587	CD1 LEU	494	18.777	49.188	65.130	1.00
	ATOM 6.58	2588	CD2 LEU	494	20.588	50.169	63.619	1.00
	ATOM 7.76	2589	C LEU	494	19.489	47.393	60.482	1.00
20	ATOM 8.54	2590	O LEU	494	20.648	47.259	60.094	1.00
	ATOM 8.30	2591	N GLU	495	18.498	46.580	60.118	1.00
	ATOM 0.00	2592	H GLU	495	17.585	46.751	60.430	1.00
	ATOM 9.37	2593	CA GLU	495	18.765	45.453	59.230	1.00
25	ATOM 10.30	2594	CB GLU	495	17.566	44.502	59.139	1.00
	ATOM 12.04	2595	CG GLU	495	17.360	43.687	60.404	1.00
	ATOM 14.75	2596	CD GLU	495	16.133	42.795	60.346	1.00
	ATOM 17.48	2597	OE1 GLU	495	15.393	42.812	59.331	1.00
30	ATOM 15.95	2598	OE2 GLU	495	15.858	42.105	61.362	1.00
	ATOM 9.75	2599	C GLU	495	19.195	45.944	57.850	1.00
	ATOM 9.88	2600	O GLU	495	20.099	45.395	57.222	1.00
	ATOM 8.31	2601	N ASP	496	18.574	47.016	57.385	1.00
35	ATOM 0.00	2602	H ASP	496	17.904	47.484	57.931	1.00
	ATOM 9.40	2603	CA ASP	496	18.930	47.551	56.084	1.00
	ATOM 9.92	2604	CB ASP	496	17.905	48.638	55.683	1.00
	ATOM 10.66	2605	CG ASP	496	16.622	48.068	55.109	1.00
40	ATOM 13.65	2606	OD1 ASP	496	16.577	46.842	54.781	1.00

	ATOM 10.73	2607	OD2	ASP	496	15.618	48.817	54.976	1.00
	ATOM 9.26	2608	C	ASP	496	20.344	48.131	56.130	1.00
5	ATOM 10.67	2609	O	ASP	496	21.085	48.049	55.169	1.00
	ATOM 9.18	2610	N	PHE	497	20.684	48.787	57.241	1.00
10	ATOM 0.00	2611	H	PHE	497	20.045	48.836	57.979	1.00
	ATOM 10.38	2612	CA	PHE	497	22.009	49.385	57.410	1.00
	ATOM 9.42	2613	CB	PHE	497	22.103	50.110	58.765	1.00
15	ATOM 9.62	2614	CG	PHE	497	21.388	51.443	58.822	1.00
	ATOM 9.72	2615	CD1	PHE	497	20.736	51.943	57.722	1.00
20	ATOM 9.12	2616	CD2	PHE	497	21.414	52.185	60.015	1.00
	ATOM 9.37	2617	CE1	PHE	497	20.102	53.192	57.800	1.00
	ATOM 8.46	2618	CE2	PHE	497	20.799	53.432	60.132	1.00
25	ATOM 7.24	2619	CZ	PHE	497	20.137	53.935	58.995	1.00
	ATOM 11.52	2620	C	PHE	497	23.081	48.271	57.381	1.00
30	ATOM 12.93	2621	O	PHE	497	24.158	48.438	56.804	1.00
	ATOM 14.28	2622	N	PHE	498	22.761	47.153	58.025	1.00
	ATOM 0.00	2623	H	PHE	498	21.890	47.107	58.477	1.00
35	ATOM 16.98	2624	CA	PHE	498	23.660	45.986	58.086	1.00
	ATOM 19.14	2625	CB	PHE	498	23.132	45.014	59.176	1.00
40	ATOM 20.38	2626	CG	PHE	498	23.659	43.596	59.107	1.00
	ATOM 22.05	2627	CD1	PHE	498	25.010	43.329	59.124	1.00
	ATOM 22.64	2628	CD2	PHE	498	22.758	42.525	59.125	1.00
45	ATOM 21.12	2629	CE1	PHE	498	25.475	42.012	59.165	1.00
	ATOM 22.55	2630	CE2	PHE	498	23.202	41.203	59.168	1.00
50	ATOM 22.00	2631	CZ	PHE	498	24.576	40.954	59.188	1.00
	ATOM 18.13	2632	C	PHE	498	23.797	45.295	56.746	1.00
	ATOM 18.94	2633	O	PHE	498	24.917	45.034	56.300	1.00
55	ATOM 20.19	2634	N	THR	499	22.687	45.073	56.055	1.00
	ATOM 0.00	2635	H	THR	499	21.829	45.405	56.384	1.00



	ATOM	2636	CA	THR	499	22.758	44.343	54.797	1.00
	22.43								
	ATOM	2637	CB	THR	499	21.399	43.789	54.373	1.00
	22.60								
5	ATOM	2638	OG1	THR	499	20.485	44.855	54.253	1.00
	23.78								
	ATOM	2639	HG1	THR	499	20.379	45.296	55.099	1.00
	0.00								
10	ATOM	2640	CG2	THR	499	20.849	42.789	55.405	1.00
	22.61								
	ATOM	2641	C	THR	499	23.419	45.195	53.736	1.00
	23.72								
	ATOM	2642	O	THR	499	23.897	44.682	52.719	1.00
	25.02								
15	ATOM	2643	N	ALA	500	23.489	46.497	54.006	1.00
	24.94								
	ATOM	2644	H	ALA	500	23.078	46.836	54.824	1.00
	0.00								
20	ATOM	2645	CA	ALA	500	24.153	47.432	53.125	1.00
	26.58								
	ATOM	2646	CB	ALA	500	23.642	48.830	53.346	1.00
	25.49								
	ATOM	2647	C	ALA	500	25.652	47.382	53.407	1.00
	27.54								
25	ATOM	2648	O	ALA	500	26.428	47.114	52.491	1.00
	28.68								
	ATOM	2649	N	THR	501	26.050	47.596	54.669	1.00
	27.16								
30	ATOM	2650	H	THR	501	25.364	47.778	55.345	1.00
	0.00								
	ATOM	2651	CA	THR	501	27.474	47.577	55.072	1.00
	26.85								
	ATOM	2652	CB	THR	501	27.687	48.037	56.555	1.00
	26.23								
35	ATOM	2653	OG1	THR	501	26.993	47.162	57.454	1.00
	26.89								
	ATOM	2654	HG1	THR	501	26.037	47.169	57.270	1.00
	0.00								
40	ATOM	2655	CG2	THR	501	27.224	49.498	56.773	1.00
	25.38								
	ATOM	2656	C	THR	501	28.144	46.196	54.904	1.00
	26.89								
	ATOM	2657	O	THR	501	27.647	45.353	54.112	1.00
	27.80								
45	ATOM	2658	OT	THR	501	29.172	45.942	55.594	1.00
	28.37								
	ATOM	2659	OH2	TIP3	1	21.620	29.748	74.825	1.00
	8.52								
50	ATOM	2660	H1	TIP3	1	21.619	30.703	74.839	1.00
	0.00								
	ATOM	2661	H2	TIP3	1	21.616	29.512	73.905	1.00
	0.00								
	ATOM	2662	OH2	TIP3	2	19.448	27.888	78.810	1.00
	8.93								
55	ATOM	2663	H1	TIP3	2	19.438	28.841	78.818	1.00
	0.00								
	ATOM	2664	H2	TIP3	2	19.446	27.649	77.893	1.00
	0.00								

	ATOM	2665	OH2	TIP3	3	14.802	51.739	79.298	1.00
	7.18								
	ATOM	2666	H1	TIP3	3	14.787	52.706	79.289	1.00
	0.00								
5	ATOM	2667	H2	TIP3	3	14.787	51.512	78.362	1.00
	0.00								
	ATOM	2668	OH2	TIP3	4	19.440	60.726	77.700	1.00
	6.25								
10	ATOM	2669	H1	TIP3	4	19.463	61.675	77.720	1.00
	0.00								
	ATOM	2670	H2	TIP3	4	19.463	60.476	76.790	1.00
	0.00								
	ATOM	2671	OH2	TIP3	5	20.579	62.826	73.348	1.00
	6.02								
15	ATOM	2672	H1	TIP3	5	20.582	63.772	73.343	1.00
	0.00								
	ATOM	2673	H2	TIP3	5	20.584	62.575	72.424	1.00
	0.00								
	ATOM	2674	OH2	TIP3	6	16.627	32.849	74.682	1.00
20	6.62								
	ATOM	2675	H1	TIP3	6	16.613	33.808	74.673	1.00
	0.00								
	ATOM	2676	H2	TIP3	6	16.613	32.606	73.751	1.00
	0.00								
25	ATOM	2677	OH2	TIP3	7	24.567	68.831	70.758	1.00
	11.18								
	ATOM	2678	H1	TIP3	7	24.591	69.792	70.745	1.00
	0.00								
	ATOM	2679	H2	TIP3	7	24.591	68.599	69.825	1.00
30	0.00								
	ATOM	2680	OH2	TIP3	8	3.910	16.814	94.936	1.00
	8.70								
	ATOM	2681	H1	TIP3	8	3.914	17.769	94.934	1.00
	0.00								
35	ATOM	2682	H2	TIP3	8	3.914	16.574	94.006	1.00
	0.00								
	ATOM	2683	OH2	TIP3	9	18.100	61.850	79.778	1.00
	10.32								
	ATOM	2684	H1	TIP3	9	18.102	62.807	79.772	1.00
40	0.00								
	ATOM	2685	H2	TIP3	9	18.102	61.605	78.848	1.00
	0.00								
	ATOM	2686	OH2	TIP3	10	16.772	62.110	62.500	1.00
	12.69								
45	ATOM	2687	H1	TIP3	10	16.756	63.066	62.499	1.00
	0.00								
	ATOM	2688	H2	TIP3	10	16.749	61.901	61.567	1.00
	0.00								
	ATOM	2689	OH2	TIP3	11	25.240	50.449	80.104	1.00
50	7.27								
	ATOM	2690	H1	TIP3	11	25.255	51.408	80.086	1.00
	0.00								
	ATOM	2691	H2	TIP3	11	25.254	50.208	79.167	1.00
	0.00								
55	ATOM	2692	OH2	TIP3	12	26.659	31.622	75.084	1.00
	8.62								
	ATOM	2693	H1	TIP3	12	26.656	32.587	75.083	1.00
	0.00								

	ATOM	2694	H2	TIP3	12	26.656	31.396	74.154	1.00
	0.00								
	ATOM	2695	OH2	TIP3	13	25.383	21.709	76.987	1.00
	9.37								
5	ATOM	2696	H1	TIP3	13	25.381	22.678	76.989	1.00
	0.00								
	ATOM	2697	H2	TIP3	13	25.381	21.489	76.055	1.00
	0.00								
10	ATOM	2698	OH2	TIP3	14	3.800	51.757	76.179	1.00
	16.31								
	ATOM	2699	H1	TIP3	14	3.790	52.707	76.172	1.00
	0.00								
	ATOM	2700	H2	TIP3	14	3.790	51.508	75.250	1.00
	0.00								
15	ATOM	2701	OH2	TIP3	15	33.014	39.952	77.627	1.00
	15.59								
	ATOM	2702	H1	TIP3	15	33.021	40.918	77.633	1.00
	0.00								
	ATOM	2703	H2	TIP3	15	33.021	39.720	76.707	1.00
	0.00								
20	ATOM	2704	OH2	TIP3	16	23.244	20.494	78.039	1.00
	9.49								
	ATOM	2705	H1	TIP3	16	23.242	21.447	78.032	1.00
	0.00								
25	ATOM	2706	H2	TIP3	16	23.242	20.250	77.107	1.00
	0.00								
	ATOM	2707	OH2	TIP3	17	7.671	53.984	63.752	1.00
	12.47								
30	ATOM	2708	H1	TIP3	17	7.669	54.938	63.759	1.00
	0.00								
	ATOM	2709	H2	TIP3	17	7.669	53.747	62.829	1.00
	0.00								
	ATOM	2710	OH2	TIP3	18	28.174	56.185	74.630	1.00
	10.19								
35	ATOM	2711	H1	TIP3	18	28.170	57.156	74.603	1.00
	0.00								
	ATOM	2712	H2	TIP3	18	28.170	55.960	73.685	1.00
	0.00								
40	ATOM	2713	OH2	TIP3	19	22.146	18.808	82.244	1.00
	9.68								
	ATOM	2714	H1	TIP3	19	22.146	19.771	82.246	1.00
	0.00								
	ATOM	2715	H2	TIP3	19	22.148	18.581	81.320	1.00
	0.00								
45	ATOM	2716	OH2	TIP3	20	13.274	34.172	76.713	1.00
	9.25								
	ATOM	2717	H1	TIP3	20	13.268	35.135	76.706	1.00
	0.00								
	ATOM	2718	H2	TIP3	20	13.268	33.939	75.780	1.00
	0.00								
50	ATOM	2719	OH2	TIP3	21	7.239	57.436	104.519	1.00
	13.95								
	ATOM	2720	H1	TIP3	21	7.217	58.400	104.524	1.00
	0.00								
55	ATOM	2721	H2	TIP3	21	7.217	57.205	103.595	1.00
	0.00								
	ATOM	2722	OH2	TIP3	22	35.743	44.113	79.494	1.00
	19.75								

	ATOM	2723	H1	TIP3	22	35.762	45.067	79.489	1.00
	0.00								
	ATOM	2724	H2	TIP3	22	35.762	43.865	78.562	1.00
	0.00								
5	ATOM	2725	OH2	TIP3	23	8.606	65.639	69.086	1.00
	14.66								
	ATOM	2726	H1	TIP3	23	8.604	66.584	69.083	1.00
	0.00								
10	ATOM	2727	H2	TIP3	23	8.604	65.377	68.158	1.00
	0.00								
	ATOM	2728	OH2	TIP3	24	22.220	28.061	79.375	1.00
	12.39								
	ATOM	2729	H1	TIP3	24	22.229	29.002	79.345	1.00
	0.00								
15	ATOM	2730	H2	TIP3	24	22.240	27.824	78.438	1.00
	0.00								
	ATOM	2731	OH2	TIP3	25	14.088	69.122	73.924	1.00
	17.10								
20	ATOM	2732	H1	TIP3	25	14.085	70.074	73.909	1.00
	0.00								
	ATOM	2733	H2	TIP3	25	14.085	68.881	72.986	1.00
	0.00								
	ATOM	2734	OH2	TIP3	26	13.661	55.614	79.562	1.00
	10.12								
25	ATOM	2735	H1	TIP3	26	13.655	56.564	79.554	1.00
	0.00								
	ATOM	2736	H2	TIP3	26	13.666	55.383	78.629	1.00
	0.00								
30	ATOM	2737	OH2	TIP3	27	4.331	54.670	67.201	1.00
	13.37								
	ATOM	2738	H1	TIP3	27	4.327	55.632	67.197	1.00
	0.00								
	ATOM	2739	H2	TIP3	27	4.327	54.437	66.270	1.00
	0.00								
35	ATOM	2740	OH2	TIP3	28	6.632	45.326	67.982	1.00
	11.48								
	ATOM	2741	H1	TIP3	28	6.608	46.242	67.924	1.00
	0.00								
40	ATOM	2742	H2	TIP3	28	6.631	45.075	67.039	1.00
	0.00								
	ATOM	2743	OH2	TIP3	29	24.783	78.595	73.991	1.00
	10.05								
	ATOM	2744	H1	TIP3	29	24.778	79.550	74.003	1.00
	0.00								
45	ATOM	2745	H2	TIP3	29	24.778	78.358	73.073	1.00
	0.00								
	ATOM	2746	OH2	TIP3	30	30.152	59.848	72.332	1.00
	12.11								
50	ATOM	2747	H1	TIP3	30	30.155	60.803	72.334	1.00
	0.00								
	ATOM	2748	H2	TIP3	30	30.157	59.604	71.413	1.00
	0.00								
	ATOM	2749	OH2	TIP3	31	25.969	23.735	78.543	1.00
	14.18								
55	ATOM	2750	H1	TIP3	31	26.022	24.715	78.548	1.00
	0.00								
	ATOM	2751	H2	TIP3	31	26.034	23.562	77.609	1.00
	0.00								

	ATOM 18.92	2752	OH2	TIP3	32	3.073	56.966	68.148	1.00
	ATOM 0.00	2753	H1	TIP3	32	3.062	57.921	68.149	1.00
5	ATOM 0.00	2754	H2	TIP3	32	3.064	56.716	67.222	1.00
	ATOM 17.22	2755	OH2	TIP3	33	6.529	52.062	70.116	1.00
10	ATOM 0.00	2756	H1	TIP3	33	6.515	53.004	70.134	1.00
	ATOM 0.00	2757	H2	TIP3	33	6.513	51.812	69.201	1.00
	ATOM 17.50	2758	OH2	TIP3	34	26.402	70.378	71.831	1.00
15	ATOM 0.00	2759	H1	TIP3	34	26.425	71.335	71.835	1.00
	ATOM 0.00	2760	H2	TIP3	34	26.425	70.133	70.905	1.00
	ATOM 15.92	2761	OH2	TIP3	35	30.299	41.047	81.602	1.00
20	ATOM 0.00	2762	H1	TIP3	35	30.269	42.006	81.613	1.00
	ATOM 0.00	2763	H2	TIP3	35	30.277	40.826	80.682	1.00
25	ATOM 13.79	2764	OH2	TIP3	36	13.099	71.465	72.644	1.00
	ATOM 0.00	2765	H1	TIP3	36	13.094	72.419	72.624	1.00
	ATOM 0.00	2766	H2	TIP3	36	13.088	71.217	71.707	1.00
30	ATOM 15.04	2767	OH2	TIP3	37	29.727	18.018	80.773	1.00
	ATOM 0.00	2768	H1	TIP3	37	29.725	18.973	80.787	1.00
35	ATOM 0.00	2769	H2	TIP3	37	29.726	17.774	79.864	1.00
	ATOM 19.58	2770	OH2	TIP3	38	36.064	38.671	74.415	1.00
40	ATOM 0.00	2771	H1	TIP3	38	36.087	39.602	74.431	1.00
	ATOM 0.00	2772	H2	TIP3	38	36.082	38.420	73.497	1.00
	ATOM 21.09	2773	OH2	TIP3	39	29.627	65.885	75.019	1.00
45	ATOM 0.00	2774	H1	TIP3	39	29.655	66.852	75.030	1.00
	ATOM 0.00	2775	H2	TIP3	39	29.655	65.661	74.098	1.00
	ATOM 13.90	2776	OH2	TIP3	40	16.595	52.544	84.851	1.00
50	ATOM 0.00	2777	H1	TIP3	40	16.565	53.498	84.853	1.00
	ATOM 0.00	2778	H2	TIP3	40	16.565	52.301	83.924	1.00
55	ATOM 20.52	2779	OH2	TIP3	41	4.206	43.642	85.694	1.00
	ATOM 0.00	2780	H1	TIP3	41	4.220	44.619	85.718	1.00

	ATOM 0.00	2781	H2	TIP3	41	4.220	43.432	84.778	1.00
	14.26	2782	OH2	TIP3	42	29.857	58.327	74.600	1.00
5	ATOM 0.00	2783	H1	TIP3	42	29.858	59.293	74.612	1.00
	ATOM 0.00	2784	H2	TIP3	42	29.858	58.097	73.679	1.00
10	ATOM 13.92	2785	OH2	TIP3	43	16.161	19.916	80.183	1.00
	ATOM 0.00	2786	H1	TIP3	43	16.152	20.873	80.195	1.00
	ATOM 0.00	2787	H2	TIP3	43	16.152	19.673	79.264	1.00
15	ATOM 11.80	2788	OH2	TIP3	44	4.638	47.641	75.156	1.00
	ATOM 0.00	2789	H1	TIP3	44	4.658	48.599	75.161	1.00
	ATOM 0.00	2790	H2	TIP3	44	4.658	47.399	74.240	1.00
20	ATOM 15.07	2791	OH2	TIP3	45	15.020	76.683	76.321	1.00
	ATOM 0.00	2792	H1	TIP3	45	15.022	77.651	76.323	1.00
25	ATOM 0.00	2793	H2	TIP3	45	15.022	76.454	75.392	1.00
	ATOM 15.44	2794	OH2	TIP3	46	6.193	59.954	101.345	1.00
30	ATOM 0.00	2795	H1	TIP3	46	6.179	60.902	101.354	1.00
	ATOM 0.00	2796	H2	TIP3	46	6.179	59.702	100.426	1.00
	ATOM 10.14	2797	OH2	TIP3	47	14.081	45.728	83.666	1.00
35	ATOM 0.00	2798	H1	TIP3	47	14.071	46.678	83.675	1.00
	ATOM 0.00	2799	H2	TIP3	47	14.071	45.475	82.745	1.00
	ATOM 17.96	2800	OH2	TIP3	48	14.304	25.203	81.378	1.00
40	ATOM 0.00	2801	H1	TIP3	48	14.295	26.140	81.372	1.00
	ATOM 0.00	2802	H2	TIP3	48	14.295	24.933	80.447	1.00
45	ATOM 16.11	2803	OH2	TIP3	49	10.646	40.704	67.208	1.00
	ATOM 0.00	2804	H1	TIP3	49	10.619	41.662	67.206	1.00
50	ATOM 0.00	2805	H2	TIP3	49	10.619	40.464	66.278	1.00
	ATOM 18.07	2806	OH2	TIP3	50	33.324	41.993	62.711	1.00
	ATOM 0.00	2807	H1	TIP3	50	33.287	42.925	62.692	1.00
55	ATOM 0.00	2808	H2	TIP3	50	33.288	41.711	61.778	1.00
	ATOM 16.85	2809	OH2	TIP3	51	6.569	57.850	77.095	1.00

	ATOM	2810	H1	TIP3	51	6.578	58.806	77.099	1.00
	0.00								
	ATOM	2811	H2	TIP3	51	6.578	57.612	76.168	1.00
	0.00								
5	ATOM	2812	OH2	TIP3	52	17.054	28.788	80.134	1.00
	18.95								
	ATOM	2813	H1	TIP3	52	17.067	29.730	80.166	1.00
	0.00								
10	ATOM	2814	H2	TIP3	52	17.067	28.527	79.234	1.00
	0.00								
	ATOM	2815	OH2	TIP3	53	6.065	57.530	65.648	1.00
	23.77								
	ATOM	2816	H1	TIP3	53	6.086	58.499	65.665	1.00
	0.00								
15	ATOM	2817	H2	TIP3	53	6.086	57.308	64.732	1.00
	0.00								
	ATOM	2818	OH2	TIP3	54	17.752	52.844	80.755	1.00
	13.96								
	ATOM	2819	H1	TIP3	54	17.734	53.803	80.742	1.00
20	0.00								
	ATOM	2820	H2	TIP3	54	17.734	52.609	79.819	1.00
	0.00								
	ATOM	2821	OH2	TIP3	55	11.753	33.295	69.481	1.00
	17.77								
25	ATOM	2822	H1	TIP3	55	11.721	34.247	69.504	1.00
	0.00								
	ATOM	2823	H2	TIP3	55	11.721	33.053	68.572	1.00
	0.00								
	ATOM	2824	OH2	TIP3	56	12.945	35.826	79.153	1.00
30	17.23								
	ATOM	2825	H1	TIP3	56	12.909	36.781	79.168	1.00
	0.00								
	ATOM	2826	H2	TIP3	56	12.909	35.585	78.235	1.00
	0.00								
35	ATOM	2827	OH2	TIP3	57	40.075	43.408	77.618	1.00
	25.03								
	ATOM	2828	H1	TIP3	57	40.050	44.376	77.632	1.00
	0.00								
	ATOM	2829	H2	TIP3	57	40.050	43.185	76.701	1.00
40	0.00								
	ATOM	2830	OH2	TIP3	58	3.057	18.092	92.594	1.00
	15.17								
	ATOM	2831	H1	TIP3	58	3.038	19.049	92.595	1.00
	0.00								
45	ATOM	2832	H2	TIP3	58	3.044	17.853	91.666	1.00
	0.00								
	ATOM	2833	OH2	TIP3	59	13.402	23.676	95.191	1.00
	18.92								
	ATOM	2834	H1	TIP3	59	13.392	24.628	95.178	1.00
50	0.00								
	ATOM	2835	H2	TIP3	59	13.388	23.427	94.259	1.00
	0.00								
	ATOM	2836	OH2	TIP3	60	11.853	37.895	66.174	1.00
	24.55								
55	ATOM	2837	H1	TIP3	60	11.836	38.860	66.171	1.00
	0.00								
	ATOM	2838	H2	TIP3	60	11.836	37.670	65.243	1.00
	0.00								

	ATOM	2839	OH2	TIP3	61	24.411	67.363	74.598	1.00
	19.56								
	ATOM	2840	H1	TIP3	61	24.434	68.332	74.589	1.00
	0.00								
5	ATOM	2841	H2	TIP3	61	24.434	67.144	73.661	1.00
	0.00								
	ATOM	2842	OH2	TIP3	62	44.003	40.237	77.121	1.00
	31.94								
10	ATOM	2843	H1	TIP3	62	43.457	41.037	77.326	1.00
	0.00								
	ATOM	2844	H2	TIP3	62	43.436	39.913	76.436	1.00
	0.00								
	ATOM	2845	OH2	TIP3	63	1.339	21.721	100.240	1.00
	17.54								
15	ATOM	2846	H1	TIP3	63	1.339	22.673	100.256	1.00
	0.00								
	ATOM	2847	H2	TIP3	63	1.339	21.472	99.328	1.00
	0.00								
	ATOM	2848	OH2	TIP3	64	11.283	66.503	68.672	1.00
	18.27								
20	ATOM	2849	H1	TIP3	64	11.300	67.456	68.667	1.00
	0.00								
	ATOM	2850	H2	TIP3	64	11.300	66.256	67.742	1.00
	0.00								
25	ATOM	2851	OH2	TIP3	65	4.681	48.385	66.955	1.00
	26.86								
	ATOM	2852	H1	TIP3	65	4.695	49.332	66.942	1.00
	0.00								
	ATOM	2853	H2	TIP3	65	4.695	48.132	66.020	1.00
	0.00								
30	ATOM	2854	OH2	TIP3	66	23.486	29.111	77.108	1.00
	18.25								
	ATOM	2855	H1	TIP3	66	23.490	30.049	77.092	1.00
	0.00								
35	ATOM	2856	H2	TIP3	66	23.496	28.856	76.174	1.00
	0.00								
	ATOM	2857	OH2	TIP3	67	13.754	73.903	73.972	1.00
	16.09								
	ATOM	2858	H1	TIP3	67	13.743	74.857	73.965	1.00
	0.00								
40	ATOM	2859	H2	TIP3	67	13.743	73.658	73.039	1.00
	0.00								
	ATOM	2860	OH2	TIP3	68	15.325	54.153	81.648	1.00
	15.14								
45	ATOM	2861	H1	TIP3	68	15.321	55.104	81.648	1.00
	0.00								
	ATOM	2862	H2	TIP3	68	15.321	53.903	80.723	1.00
	0.00								
	ATOM	2863	OH2	TIP3	69	35.572	54.636	72.552	1.00
	30.62								
50	ATOM	2864	H1	TIP3	69	35.594	55.597	72.556	1.00
	0.00								
	ATOM	2865	H2	TIP3	69	35.594	54.403	71.625	1.00
	0.00								
55	ATOM	2866	OH2	TIP3	70	25.795	53.197	58.018	1.00
	33.10								
	ATOM	2867	H1	TIP3	70	25.769	54.178	58.023	1.00
	0.00								



	ATOM	2868	H2	TIP3	70	25.769	52.994	57.086	1.00
	0.00								
	ATOM	2869	OH2	TIP3	71	14.517	45.581	56.939	1.00
	20.16								
5	ATOM	2870	H1	TIP3	71	14.506	46.543	56.962	1.00
	0.00								
	ATOM	2871	H2	TIP3	71	14.506	45.346	56.025	1.00
	0.00								
10	ATOM	2872	OH2	TIP3	72	9.677	42.302	87.127	1.00
	22.96								
	ATOM	2873	H1	TIP3	72	9.690	43.260	87.147	1.00
	0.00								
	ATOM	2874	H2	TIP3	72	9.690	42.060	86.212	1.00
	0.00								
15	ATOM	2875	OH2	TIP3	73	24.579	26.235	78.496	1.00
	26.31								
	ATOM	2876	H1	TIP3	73	24.592	27.209	78.486	1.00
	0.00								
	ATOM	2877	H2	TIP3	73	24.592	26.024	77.561	1.00
20	0.00								
	ATOM	2878	OH2	TIP3	74	17.567	34.269	99.900	1.00
	24.15								
	ATOM	2879	H1	TIP3	74	17.549	35.217	99.899	1.00
	0.00								
25	ATOM	2880	H2	TIP3	74	17.550	34.016	98.977	1.00
	0.00								
	ATOM	2881	OH2	TIP3	75	32.076	34.036	97.002	1.00
	36.60								
30	ATOM	2882	H1	TIP3	75	32.061	34.984	97.041	1.00
	0.00								
	ATOM	2883	H2	TIP3	75	32.070	33.822	96.078	1.00
	0.00								
	ATOM	2884	OH2	TIP3	76	29.996	33.471	98.371	1.00
	32.47								
35	ATOM	2885	H1	TIP3	76	30.003	34.432	98.365	1.00
	0.00								
	ATOM	2886	H2	TIP3	76	30.003	33.240	97.440	1.00
	0.00								
	ATOM	2887	OH2	TIP3	77	26.355	72.780	70.720	1.00
40	12.80								
	ATOM	2888	H1	TIP3	77	26.352	73.726	70.722	1.00
	0.00								
	ATOM	2889	H2	TIP3	77	26.354	72.528	69.797	1.00
	0.00								
45	ATOM	2890	OH2	TIP3	78	12.021	33.492	80.130	1.00
	11.11								
	ATOM	2891	H1	TIP3	78	12.012	34.444	80.131	1.00
	0.00								
	ATOM	2892	H2	TIP3	78	12.012	33.245	79.207	1.00
50	0.00								
	ATOM	2893	OH2	TIP3	79	29.270	62.453	72.270	1.00
	14.54								
	ATOM	2894	H1	TIP3	79	29.280	63.420	72.244	1.00
	0.00								
55	ATOM	2895	H2	TIP3	79	29.280	62.224	71.323	1.00
	0.00								
	ATOM	2896	OH2	TIP3	80	26.858	65.447	74.374	1.00
	14.48								

5	ATOM 0.00	2897	H1	TIP3	80	26.860	66.399	74.373	1.00
	ATOM 0.00	2898	H2	TIP3	80	26.866	65.196	73.462	1.00
	ATOM 20.05	2899	OH2	TIP3	81	27.145	19.820	78.037	1.00
	ATOM 0.00	2900	H1	TIP3	81	27.159	20.786	78.038	1.00
10	ATOM 0.00	2901	H2	TIP3	81	27.159	19.591	77.112	1.00
	ATOM 22.88	2902	OH2	TIP3	82	29.828	36.381	82.139	1.00
	ATOM 0.00	2903	H1	TIP3	82	29.845	37.338	82.130	1.00
	ATOM 0.00	2904	H2	TIP3	82	29.845	36.141	81.206	1.00
15	ATOM 19.26	2905	OH2	TIP3	84	18.936	52.413	83.238	1.00
	ATOM 0.00	2906	H1	TIP3	84	18.907	53.373	83.236	1.00
	ATOM 0.00	2907	H2	TIP3	84	18.907	52.179	82.308	1.00
	ATOM 23.28	2908	OH2	TIP3	85	27.489	24.446	94.600	1.00
20	ATOM 0.00	2909	H1	TIP3	85	27.499	25.406	94.617	1.00
	ATOM 0.00	2910	H2	TIP3	85	27.499	24.207	93.689	1.00
	ATOM 20.60	2911	OH2	TIP3	86	-1.525	21.244	100.281	1.00
	ATOM 0.00	2912	H1	TIP3	86	-1.522	22.190	100.278	1.00
25	ATOM 0.00	2913	H2	TIP3	86	-1.522	20.989	99.353	1.00
	ATOM 21.69	2914	OH2	TIP3	87	15.694	35.478	101.363	1.00
	ATOM 0.00	2915	H1	TIP3	87	15.706	36.430	101.384	1.00
	ATOM 0.00	2916	H2	TIP3	87	15.706	35.236	100.447	1.00
30	ATOM 19.38	2917	OH2	TIP3	88	34.425	37.817	76.435	1.00
	ATOM 0.00	2918	H1	TIP3	88	34.435	38.779	76.430	1.00
	ATOM 0.00	2919	H2	TIP3	88	34.435	37.591	75.503	1.00
	ATOM 24.69	2920	OH2	TIP3	89	24.246	74.238	76.852	1.00
35	ATOM 0.00	2921	H1	TIP3	89	24.243	75.192	76.866	1.00
	ATOM 0.00	2922	H2	TIP3	89	24.243	73.998	75.931	1.00
	ATOM 20.65	2923	OH2	TIP3	90	13.178	22.440	79.586	1.00
	ATOM 0.00	2924	H1	TIP3	90	13.179	23.405	79.587	1.00
40	ATOM 0.00	2925	H2	TIP3	90	13.179	22.206	78.661	1.00

	ATOM	2926	OH2	TIP3	91	9.901	52.179	79.541	1.00
	14.50								
	ATOM	2927	H1	TIP3	91	9.885	53.139	79.541	1.00
	0.00								
5	ATOM	2928	H2	TIP3	91	9.885	51.939	78.615	1.00
	0.00								
	ATOM	2929	OH2	TIP3	92	20.065	71.147	85.203	1.00
	24.37								
10	ATOM	2930	H1	TIP3	92	20.041	72.108	85.216	1.00
	0.00								
	ATOM	2931	H2	TIP3	92	20.041	70.911	84.282	1.00
	0.00								
	ATOM	2932	OH2	TIP3	93	4.592	59.423	77.902	1.00
	20.98								
15	ATOM	2933	H1	TIP3	93	4.607	60.387	77.908	1.00
	0.00								
	ATOM	2934	H2	TIP3	93	4.607	59.198	76.976	1.00
	0.00								
	ATOM	2935	OH2	TIP3	94	10.454	59.113	64.371	1.00
20	20.16								
	ATOM	2936	H1	TIP3	94	10.456	60.064	64.357	1.00
	0.00								
	ATOM	2937	H2	TIP3	94	10.456	58.865	63.436	1.00
	0.00								
25	ATOM	2938	OH2	TIP3	95	17.505	51.846	87.411	1.00
	18.46								
	ATOM	2939	H1	TIP3	95	17.475	52.799	87.416	1.00
	0.00								
	ATOM	2940	H2	TIP3	95	17.475	51.604	86.488	1.00
30	0.00								
	ATOM	2941	OH2	TIP3	96	14.817	19.185	88.279	1.00
	20.43								
	ATOM	2942	H1	TIP3	96	14.808	20.144	88.264	1.00
	0.00								
35	ATOM	2943	H2	TIP3	96	14.808	18.951	87.347	1.00
	0.00								
	ATOM	2944	OH2	TIP3	98	22.550	31.892	72.695	1.00
	26.87								
	ATOM	2945	H1	TIP3	98	22.604	32.834	72.780	1.00
40	0.00								
	ATOM	2946	H2	TIP3	98	22.605	31.632	71.822	1.00
	0.00								
	ATOM	2947	OH2	TIP3	99	16.431	46.142	86.054	1.00
	19.46								
45	ATOM	2948	H1	TIP3	99	16.410	47.101	86.053	1.00
	0.00								
	ATOM	2949	H2	TIP3	99	16.412	45.907	85.128	1.00
	0.00								
	ATOM	2950	OH2	TIP3	100	32.761	59.838	71.205	1.00
50	21.01								
	ATOM	2951	H1	TIP3	100	32.787	60.797	71.210	1.00
	0.00								
	ATOM	2952	H2	TIP3	100	32.789	59.595	70.293	1.00
	0.00								
55	ATOM	2953	OH2	TIP3	101	12.534	45.025	99.009	1.00
	24.38								
	ATOM	2954	H1	TIP3	101	12.550	45.969	99.012	1.00
	0.00								

	ATOM	2955	H2	TIP3	101	12.550	44.767	98.085	1.00
	0.00								
	ATOM	2956	OH2	TIP3	102	15.287	38.470	102.089	1.00
	20.83								
5	ATOM	2957	H1	TIP3	102	15.270	39.417	102.112	1.00
	0.00								
	ATOM	2958	H2	TIP3	102	15.270	38.212	101.180	1.00
	0.00								
10	ATOM	2959	OH2	TIP3	103	-1.791	21.163	94.344	1.00
	19.97								
	ATOM	2960	H1	TIP3	103	-1.773	22.122	94.336	1.00
	0.00								
	ATOM	2961	H2	TIP3	103	-1.775	20.933	93.418	1.00
	0.00								
15	ATOM	2962	OH2	TIP3	104	23.344	43.006	94.136	1.00
	22.28								
	ATOM	2963	H1	TIP3	104	23.328	43.972	94.120	1.00
	0.00								
	ATOM	2964	H2	TIP3	104	23.328	42.778	93.195	1.00
	0.00								
20	ATOM	2965	OH2	TIP3	105	24.245	18.434	94.544	1.00
	24.15								
	ATOM	2966	H1	TIP3	105	24.232	19.393	94.540	1.00
	0.00								
25	ATOM	2967	H2	TIP3	105	24.232	18.194	93.617	1.00
	0.00								
	ATOM	2968	OH2	TIP3	106	32.538	63.422	69.289	1.00
	23.57								
30	ATOM	2969	H1	TIP3	106	32.501	64.379	69.349	1.00
	0.00								
	ATOM	2970	H2	TIP3	106	32.500	63.180	68.399	1.00
	0.00								
	ATOM	2971	OH2	TIP3	107	32.847	33.726	71.640	1.00
	22.75								
35	ATOM	2972	H1	TIP3	107	32.842	34.676	71.651	1.00
	0.00								
	ATOM	2973	H2	TIP3	107	32.842	33.471	70.723	1.00
	0.00								
	ATOM	2974	OH2	TIP3	108	6.155	39.952	88.035	1.00
	22.81								
40	ATOM	2975	H1	TIP3	108	6.119	40.912	88.037	1.00
	0.00								
	ATOM	2976	H2	TIP3	108	6.119	39.714	87.107	1.00
	0.00								
45	ATOM	2977	OH2	TIP3	109	27.765	29.208	75.507	1.00
	27.86								
	ATOM	2978	H1	TIP3	109	27.701	30.128	75.507	1.00
	0.00								
	ATOM	2979	H2	TIP3	109	27.702	28.917	74.585	1.00
	0.00								
50	ATOM	2980	OH2	TIP3	110	34.641	32.194	91.953	1.00
	27.76								
	ATOM	2981	H1	TIP3	110	34.657	33.159	91.941	1.00
	0.00								
55	ATOM	2982	H2	TIP3	110	34.657	31.965	91.017	1.00
	0.00								
	ATOM	2983	OH2	TIP3	111	5.934	50.021	63.248	1.00
	22.40								

	ATOM	2984	H1	TIP3	111	5.943	50.984	63.248	1.00
	0.00								
	ATOM	2985	H2	TIP3	111	5.943	49.791	62.317	1.00
	0.00								
5	ATOM	2986	OH2	TIP3	112	7.947	27.996	92.109	1.00
	26.50								
	ATOM	2987	H1	TIP3	112	7.940	28.966	92.116	1.00
	0.00								
10	ATOM	2988	H2	TIP3	112	7.940	27.778	91.185	1.00
	0.00								
	ATOM	2989	OH2	TIP3	113	4.672	62.116	78.254	1.00
	20.82								
	ATOM	2990	H1	TIP3	113	4.662	63.064	78.251	1.00
	0.00								
15	ATOM	2991	H2	TIP3	113	4.662	61.865	77.325	1.00
	0.00								
	ATOM	2992	OH2	TIP3	114	12.054	21.331	95.197	1.00
	26.63								
	ATOM	2993	H1	TIP3	114	12.049	22.291	95.167	1.00
	0.00								
20	ATOM	2994	H2	TIP3	114	12.052	21.095	94.254	1.00
	0.00								
	ATOM	2995	OH2	TIP3	115	-5.706	20.084	93.477	1.00
	29.07								
25	ATOM	2996	H1	TIP3	115	-5.716	21.048	93.469	1.00
	0.00								
	ATOM	2997	H2	TIP3	115	-5.716	19.857	92.543	1.00
	0.00								
	ATOM	2998	OH2	TIP3	116	34.282	48.971	60.475	1.00
	24.24								
30	ATOM	2999	H1	TIP3	116	34.275	49.932	60.475	1.00
	0.00								
	ATOM	3000	H2	TIP3	116	34.275	48.735	59.548	1.00
	0.00								
35	ATOM	3001	OH2	TIP3	117	15.304	39.745	90.950	1.00
	20.18								
	ATOM	3002	H1	TIP3	117	15.290	40.701	90.942	1.00
	0.00								
	ATOM	3003	H2	TIP3	117	15.288	39.499	90.029	1.00
	0.00								
40	ATOM	3004	OH2	TIP3	118	20.425	34.287	86.652	1.00
	21.38								
	ATOM	3005	H1	TIP3	118	20.420	35.252	86.644	1.00
	0.00								
45	ATOM	3006	H2	TIP3	118	20.420	34.057	85.722	1.00
	0.00								
	ATOM	3007	OH2	TIP3	119	12.946	30.671	72.330	1.00
	21.81								
	ATOM	3008	H1	TIP3	119	12.939	31.621	72.336	1.00
	0.00								
50	ATOM	3009	H2	TIP3	119	12.939	30.415	71.413	1.00
	0.00								
	ATOM	3010	OH2	TIP3	120	29.267	70.890	70.793	1.00
	22.48								
55	ATOM	3011	H1	TIP3	120	29.268	71.844	70.799	1.00
	0.00								
	ATOM	3012	H2	TIP3	120	29.268	70.649	69.867	1.00
	0.00								

	ATOM 27.35	3013	OH2	TIP3	121	6.147	34.663	75.934	1.00
	ATOM 0.00	3014	H1	TIP3	121	6.142	35.632	75.940	1.00
5	ATOM 0.00	3015	H2	TIP3	121	6.142	34.437	75.013	1.00
	ATOM 24.47	3016	OH2	TIP3	122	26.574	74.898	74.914	1.00
10	ATOM 0.00	3017	H1	TIP3	122	26.584	75.856	74.919	1.00
	ATOM 0.00	3018	H2	TIP3	122	26.584	74.655	73.993	1.00
	ATOM 27.91	3019	OH2	TIP3	123	40.624	38.731	69.437	1.00
15	ATOM 0.00	3020	H1	TIP3	123	40.626	39.681	69.432	1.00
	ATOM 0.00	3021	H2	TIP3	123	40.631	38.485	68.506	1.00
20	ATOM 23.98	3022	OH2	TIP3	124	18.335	74.758	79.540	1.00
	ATOM 0.00	3023	H1	TIP3	124	18.311	75.715	79.532	1.00
	ATOM 0.00	3024	H2	TIP3	124	18.309	74.518	78.613	1.00
25	ATOM 25.27	3025	OH2	TIP3	125	24.254	25.876	95.658	1.00
	ATOM 0.00	3026	H1	TIP3	125	24.260	26.817	95.653	1.00
30	ATOM 0.00	3027	H2	TIP3	125	24.258	25.610	94.733	1.00
	ATOM 26.51	3028	OH2	TIP3	126	27.246	26.940	73.274	1.00
	ATOM 0.00	3029	H1	TIP3	126	27.105	27.879	73.539	1.00
35	ATOM 0.00	3030	H2	TIP3	126	27.084	26.684	72.509	1.00
	ATOM 31.80	3031	OH2	TIP3	127	34.397	35.886	70.708	1.00
40	ATOM 0.00	3032	H1	TIP3	127	34.382	36.839	70.706	1.00
	ATOM 0.00	3033	H2	TIP3	127	34.382	35.642	69.782	1.00
	ATOM 30.85	3034	OH2	TIP3	128	9.465	66.059	80.174	1.00
45	ATOM 0.00	3035	H1	TIP3	128	9.469	67.026	80.156	1.00
	ATOM 0.00	3036	H2	TIP3	128	9.469	65.836	79.229	1.00
50	ATOM 27.38	3037	OH2	TIP3	129	5.931	42.078	93.970	1.00
	ATOM 0.00	3038	H1	TIP3	129	5.912	43.032	93.981	1.00
	ATOM 0.00	3039	H2	TIP3	129	5.912	41.838	93.047	1.00
55	ATOM 38.29	3040	OH2	TIP3	130	20.620	40.016	85.891	1.00
	ATOM 0.00	3041	H1	TIP3	130	20.594	40.972	85.901	1.00

	ATOM	3042	H2	TIP3	130	20.594	39.776	84.970	1.00
	0.00								
	ATOM	3043	OH2	TIP3	131	22.022	36.821	86.431	1.00
	32.96								
5	ATOM	3044	H1	TIP3	131	21.996	37.776	86.440	1.00
	0.00								
	ATOM	3045	H2	TIP3	131	21.996	36.580	85.509	1.00
	0.00								
10	ATOM	3046	OH2	TIP3	132	20.893	36.741	83.379	1.00
	22.74								
	ATOM	3047	H1	TIP3	132	20.877	37.688	83.396	1.00
	0.00								
	ATOM	3048	H2	TIP3	132	20.877	36.485	82.465	1.00
	0.00								
15	ATOM	3049	OH2	TIP3	133	23.406	58.660	84.323	1.00
	21.15								
	ATOM	3050	H1	TIP3	133	23.406	59.609	84.347	1.00
	0.00								
	ATOM	3051	H2	TIP3	133	23.406	58.410	83.417	1.00
	0.00								
20	ATOM	3052	OH2	TIP3	134	23.629	54.392	85.766	1.00
	36.35								
	ATOM	3053	H1	TIP3	134	23.628	55.363	85.762	1.00
	0.00								
25	ATOM	3054	H2	TIP3	134	23.630	54.174	84.835	1.00
	0.00								
	ATOM	3055	OH2	TIP3	135	22.408	62.871	89.478	1.00
	30.51								
	ATOM	3056	H1	TIP3	135	22.406	63.808	89.470	1.00
30	0.00								
	ATOM	3057	H2	TIP3	135	22.376	62.612	88.565	1.00
	0.00								
	ATOM	3058	OH2	TIP3	136	19.425	59.372	89.140	1.00
	30.89								
35	ATOM	3059	H1	TIP3	136	19.425	60.328	89.123	1.00
	0.00								
	ATOM	3060	H2	TIP3	136	19.427	59.136	88.202	1.00
	0.00								
	ATOM	3061	OH2	TIP3	137	11.615	59.513	87.932	1.00
40	28.83								
	ATOM	3062	H1	TIP3	137	11.605	60.461	87.938	1.00
	0.00								
	ATOM	3063	H2	TIP3	137	11.605	59.258	87.013	1.00
	0.00								
45	ATOM	3064	OH2	TIP3	138	12.694	69.504	76.549	1.00
	29.32								
	ATOM	3065	H1	TIP3	138	12.696	70.443	76.547	1.00
	0.00								
	ATOM	3066	H2	TIP3	138	12.698	69.237	75.628	1.00
50	0.00								
	ATOM	3067	OH2	TIP3	139	32.023	33.237	67.973	1.00
	28.64								
	ATOM	3068	H1	TIP3	139	32.022	34.198	67.957	1.00
	0.00								
55	ATOM	3069	H2	TIP3	139	32.022	33.008	67.035	1.00
	0.00								
	ATOM	3070	OH2	TIP3	140	26.673	28.035	77.708	1.00
	22.76								

	ATOM	3071	H1	TIP3	140	26.701	28.969	77.676	1.00
	0.00								
	ATOM	3072	H2	TIP3	140	26.701	27.768	76.777	1.00
	0.00								
5	ATOM	3073	OH2	TIP3	141	32.465	52.473	65.827	1.00
	30.71								
	ATOM	3074	H1	TIP3	141	32.493	53.434	65.832	1.00
	0.00								
10	ATOM	3075	H2	TIP3	141	32.493	52.238	64.904	1.00
	0.00								
	ATOM	3076	OH2	TIP3	142	28.087	61.297	62.694	1.00
	25.89								
	ATOM	3077	H1	TIP3	142	28.121	62.254	62.696	1.00
	0.00								
15	ATOM	3078	H2	TIP3	142	28.121	61.054	61.769	1.00
	0.00								
	ATOM	3079	OH2	TIP3	143	3.030	49.726	71.581	1.00
	29.32								
20	ATOM	3080	H1	TIP3	143	3.019	50.689	71.562	1.00
	0.00								
	ATOM	3081	H2	TIP3	143	3.019	49.500	70.637	1.00
	0.00								
	ATOM	3082	OH2	TIP3	144	3.075	49.647	74.581	1.00
	22.68								
25	ATOM	3083	H1	TIP3	144	3.069	50.596	74.585	1.00
	0.00								
	ATOM	3084	H2	TIP3	144	3.069	49.398	73.657	1.00
	0.00								
30	ATOM	3085	OH2	TIP3	145	5.155	55.012	64.654	1.00
	25.00								
	ATOM	3086	H1	TIP3	145	5.114	55.977	64.654	1.00
	0.00								
	ATOM	3087	H2	TIP3	145	5.114	54.783	63.725	1.00
	0.00								
35	ATOM	3088	OH2	TIP3	146	2.649	52.569	67.943	1.00
	27.65								
	ATOM	3089	H1	TIP3	146	2.598	53.542	67.945	1.00
	0.00								
40	ATOM	3090	H2	TIP3	146	2.598	52.353	67.013	1.00
	0.00								
	ATOM	3091	OH2	TIP3	147	25.491	46.315	95.161	1.00
	23.75								
	ATOM	3092	H1	TIP3	147	25.505	47.272	95.167	1.00
	0.00								
45	ATOM	3093	H2	TIP3	147	25.505	46.074	94.235	1.00
	0.00								
	ATOM	3094	OH2	TIP3	148	24.063	56.944	86.112	1.00
	32.65								
50	ATOM	3095	H1	TIP3	148	24.066	57.893	86.106	1.00
	0.00								
	ATOM	3096	H2	TIP3	148	24.066	56.690	85.182	1.00
	0.00								
	ATOM	3097	OH2	TIP3	149	9.768	51.724	89.764	1.00
	30.10								
55	ATOM	3098	H1	TIP3	149	9.550	52.635	89.797	1.00
	0.00								
	ATOM	3099	H2	TIP3	149	9.559	51.416	88.881	1.00
	0.00								



	ATOM	3100	OH2	TIP3	150	12.830	31.443	74.972	1.00
	18.61								
	ATOM	3101	H1	TIP3	150	12.785	32.361	75.002	1.00
	0.00								
5	ATOM	3102	H2	TIP3	150	12.786	31.134	74.076	1.00
	0.00								
	ATOM	3103	OH2	TIP3	151	12.058	29.386	75.911	1.00
	26.41								
10	ATOM	3104	H1	TIP3	151	12.139	30.373	75.907	1.00
	0.00								
	ATOM	3105	H2	TIP3	151	12.148	29.211	74.968	1.00
	0.00								
	ATOM	3106	OH2	TIP3	152	21.920	58.891	87.253	1.00
	24.49								
15	ATOM	3107	H1	TIP3	152	21.940	59.824	87.237	1.00
	0.00								
	ATOM	3108	H2	TIP3	152	21.940	58.618	86.318	1.00
	0.00								
	ATOM	3109	OH2	TIP3	153	10.991	44.408	57.618	1.00
20	30.05								
	ATOM	3110	H1	TIP3	153	11.001	45.351	57.616	1.00
	0.00								
	ATOM	3111	H2	TIP3	153	11.001	44.143	56.693	1.00
	0.00								
25	ATOM	3112	OH2	TIP3	154	14.634	59.750	88.168	1.00
	26.28								
	ATOM	3113	H1	TIP3	154	14.619	60.708	88.160	1.00
	0.00								
	ATOM	3114	H2	TIP3	154	14.619	59.504	87.239	1.00
30	0.00								
	ATOM	3115	OH2	TIP3	155	3.782	51.970	70.479	1.00
	31.90								
	ATOM	3116	H1	TIP3	155	3.755	52.919	70.475	1.00
	0.00								
35	ATOM	3117	H2	TIP3	155	3.755	51.716	69.553	1.00
	0.00								
	ATOM	3118	OH2	TIP3	156	4.635	28.099	96.066	1.00
	26.26								
	ATOM	3119	H1	TIP3	156	4.632	29.065	96.071	1.00
40	0.00								
	ATOM	3120	H2	TIP3	156	4.632	27.872	95.143	1.00
	0.00								
	ATOM	3121	OH2	TIP3	157	18.575	41.802	92.535	1.00
	36.30								
45	ATOM	3122	H1	TIP3	157	18.614	42.757	92.517	1.00
	0.00								
	ATOM	3123	H2	TIP3	157	18.614	41.555	91.599	1.00
	0.00								
	ATOM	3124	OH2	TIP3	158	22.860	41.454	83.366	1.00
50	35.87								
	ATOM	3125	H1	TIP3	158	22.858	42.404	83.372	1.00
	0.00								
	ATOM	3126	H2	TIP3	158	22.858	41.204	82.446	1.00
	0.00								
55	ATOM	3127	OH2	TIP3	159	11.591	46.630	90.976	1.00
	25.90								
	ATOM	3128	H1	TIP3	159	11.624	47.583	91.014	1.00
	0.00								

	ATOM	3129	H2	TIP3	159	11.624	46.384	90.077	1.00
	0.00								
	ATOM	3130	OH2	TIP3	160	10.980	42.843	89.397	1.00
	25.17								
5	ATOM	3131	H1	TIP3	160	10.945	43.804	89.370	1.00
	0.00								
	ATOM	3132	H2	TIP3	160	10.948	42.611	88.449	1.00
	0.00								
10	ATOM	3133	OH2	TIP3	161	2.899	52.279	89.567	1.00
	35.93								
	ATOM	3134	H1	TIP3	161	2.875	53.239	89.576	1.00
	0.00								
	ATOM	3135	H2	TIP3	161	2.884	52.048	88.642	1.00
	0.00								
15	ATOM	3136	OH2	TIP3	162	1.360	52.599	87.123	1.00
	33.19								
	ATOM	3137	H1	TIP3	162	1.380	53.547	87.127	1.00
	0.00								
	ATOM	3138	H2	TIP3	162	1.380	52.347	86.199	1.00
	0.00								
20	ATOM	3139	OH2	TIP3	163	31.471	41.458	88.534	1.00
	28.07								
	ATOM	3140	H1	TIP3	163	31.480	42.416	88.537	1.00
	0.00								
25	ATOM	3141	H2	TIP3	163	31.480	41.221	87.611	1.00
	0.00								
	ATOM	3142	OH2	TIP3	164	31.236	37.995	83.715	1.00
	35.98								
30	ATOM	3143	H1	TIP3	164	31.244	38.937	83.680	1.00
	0.00								
	ATOM	3144	H2	TIP3	164	31.244	37.740	82.766	1.00
	0.00								
	ATOM	3145	OH2	TIP3	165	27.212	63.696	87.135	1.00
	31.88								
35	ATOM	3146	H1	TIP3	165	27.267	64.673	87.158	1.00
	0.00								
	ATOM	3147	H2	TIP3	165	27.267	63.485	86.220	1.00
	0.00								
	ATOM	3148	OH2	TIP3	166	16.681	64.326	68.227	1.00
	14.19								
40	ATOM	3149	H1	TIP3	166	16.644	65.299	68.243	1.00
	0.00								
	ATOM	3150	H2	TIP3	166	16.644	64.102	67.313	1.00
	0.00								
45	ATOM	3151	OH2	TIP3	167	6.593	17.748	94.755	1.00
	16.77								
	ATOM	3152	H1	TIP3	167	6.603	18.698	94.780	1.00
	0.00								
	ATOM	3153	H2	TIP3	167	6.603	17.497	93.847	1.00
	0.00								
50	ATOM	3154	OH2	TIP3	168	3.319	56.318	74.128	1.00
	35.41								
	ATOM	3155	H1	TIP3	168	3.338	57.270	74.109	1.00
	0.00								
55	ATOM	3156	H2	TIP3	168	3.338	56.073	73.190	1.00
	0.00								
	ATOM	3157	OH2	TIP3	169	17.419	44.179	55.313	1.00
	27.44								

	ATOM 0.00	3158	H1	TIP3	169	17.421	45.116	55.309	1.00
	ATOM 0.00	3159	H2	TIP3	169	17.418	43.918	54.386	1.00
5	ATOM 30.99	3160	OH2	TIP3	170	23.116	45.953	85.369	1.00
	ATOM 0.00	3161	H1	TIP3	170	23.152	46.921	85.402	1.00
10	ATOM 0.00	3162	H2	TIP3	170	23.155	45.744	84.459	1.00
	ATOM 27.99	3163	OH2	TIP3	171	23.784	31.626	74.741	1.00
	ATOM 0.00	3164	H1	TIP3	171	23.692	32.577	74.679	1.00
15	ATOM 0.00	3165	H2	TIP3	171	23.699	31.381	73.782	1.00
	ATOM 33.69	3166	OH2	TIP3	172	29.228	23.854	78.309	1.00
20	ATOM 0.00	3167	H1	TIP3	172	29.203	24.821	78.316	1.00
	ATOM 0.00	3168	H2	TIP3	172	29.203	23.628	77.385	1.00
	ATOM 30.60	3169	OH2	TIP3	173	12.110	62.970	61.321	1.00
25	ATOM 0.00	3170	H1	TIP3	173	12.072	63.931	61.315	1.00
	ATOM 0.00	3171	H2	TIP3	173	12.072	62.735	60.389	1.00
30	ATOM 29.01	3172	OH2	TIP3	174	7.496	21.769	90.909	1.00
	ATOM 0.00	3173	H1	TIP3	174	7.519	22.745	90.874	1.00
	ATOM 0.00	3174	H2	TIP3	174	7.514	21.560	89.967	1.00
35	ATOM 28.39	3175	OH2	TIP3	175	6.066	34.847	93.635	1.00
	ATOM 0.00	3176	H1	TIP3	175	6.053	35.815	93.632	1.00
40	ATOM 0.00	3177	H2	TIP3	175	6.049	34.618	92.720	1.00
	ATOM 33.99	3178	OH2	TIP3	176	6.593	44.033	89.946	1.00
	ATOM 0.00	3179	H1	TIP3	176	6.575	44.965	89.812	1.00
45	ATOM 0.00	3180	H2	TIP3	176	6.621	43.816	89.011	1.00
	ATOM 32.08	3181	OH2	TIP3	177	10.295	25.226	82.030	1.00
50	ATOM 0.00	3182	H1	TIP3	177	10.182	26.172	82.011	1.00
	ATOM 0.00	3183	H2	TIP3	177	10.184	24.969	81.098	1.00
	ATOM 25.10	3184	OH2	TIP3	178	0.809	45.203	71.524	1.00
55	ATOM 0.00	3185	H1	TIP3	178	0.842	46.181	71.532	1.00
	ATOM 0.00	3186	H2	TIP3	178	0.842	44.995	70.597	1.00

	ATOM	3187	OH2	TIP3	179	22.972	43.363	102.150	1.00
	36.75								
	ATOM	3188	H1	TIP3	179	22.966	44.314	102.170	1.00
	0.00								
5	ATOM	3189	H2	TIP3	179	22.966	43.115	101.236	1.00
	0.00								
	ATOM	3190	OH2	TIP3	180	23.237	48.451	85.106	1.00
	35.30								
10	ATOM	3191	H1	TIP3	180	23.257	49.383	85.127	1.00
	0.00								
	ATOM	3192	H2	TIP3	180	23.257	48.176	84.197	1.00
	0.00								
	ATOM	3193	OH2	TIP3	181	4.043	34.705	85.757	1.00
	24.15								
15	ATOM	3194	H1	TIP3	181	4.019	35.656	85.771	1.00
	0.00								
	ATOM	3195	H2	TIP3	181	4.019	34.455	84.843	1.00
	0.00								
	ATOM	3196	OH2	TIP3	182	20.691	39.215	94.052	1.00
20	26.94								
	ATOM	3197	H1	TIP3	182	20.695	40.183	94.093	1.00
	0.00								
	ATOM	3198	H2	TIP3	182	20.695	38.991	93.152	1.00
	0.00								
25	ATOM	3199	OH2	TIP3	183	-1.097	50.890	82.306	1.00
	33.75								
	ATOM	3200	H1	TIP3	183	-1.253	51.786	82.212	1.00
	0.00								
	ATOM	3201	H2	TIP3	183	-1.081	50.637	81.373	1.00
30	0.00								
	ATOM	3202	OH2	TIP3	184	31.787	63.274	71.545	1.00
	28.87								
	ATOM	3203	H1	TIP3	184	31.798	64.222	71.479	1.00
	0.00								
35	ATOM	3204	H2	TIP3	184	31.789	63.019	70.587	1.00
	0.00								
	ATOM	3205	OH2	TIP3	185	14.762	22.784	82.023	1.00
	32.79								
	ATOM	3206	H1	TIP3	185	14.723	23.746	82.025	1.00
40	0.00								
	ATOM	3207	H2	TIP3	185	14.721	22.557	81.094	1.00
	0.00								
	ATOM	3208	OH2	TIP3	186	30.806	69.844	80.444	1.00
	32.26								
45	ATOM	3209	H1	TIP3	186	30.787	70.789	80.464	1.00
	0.00								
	ATOM	3210	H2	TIP3	186	30.787	69.583	79.535	1.00
	0.00								
	ATOM	3211	OH2	TIP3	187	18.427	72.812	83.951	1.00
50	27.54								
	ATOM	3212	H1	TIP3	187	18.458	73.765	83.955	1.00
	0.00								
	ATOM	3213	H2	TIP3	187	18.458	72.563	83.028	1.00
	0.00								
55	ATOM	3214	OH2	TIP3	188	34.648	25.709	92.039	1.00
	33.88								
	ATOM	3215	H1	TIP3	188	34.651	26.665	92.028	1.00
	0.00								

	ATOM	3216	H2	TIP3	188	34.651	25.467	91.107	1.00
	0.00								
	ATOM	3217	OH2	TIP3	189	33.550	56.144	79.255	1.00
	25.78								
5	ATOM	3218	H1	TIP3	189	33.568	57.112	79.229	1.00
	0.00								
	ATOM	3219	H2	TIP3	189	33.568	55.923	78.308	1.00
	0.00								
10	ATOM	3220	OH2	TIP3	190	31.588	65.742	72.966	1.00
	27.89								
	ATOM	3221	H1	TIP3	190	31.537	66.700	72.938	1.00
	0.00								
	ATOM	3222	H2	TIP3	190	31.537	65.505	72.021	1.00
	0.00								
15	ATOM	3223	OH2	TIP3	191	34.007	49.937	64.148	1.00
	36.57								
	ATOM	3224	H1	TIP3	191	34.017	50.899	64.136	1.00
	0.00								
20	ATOM	3225	H2	TIP3	191	34.017	49.704	63.211	1.00
	0.00								
	ATOM	3226	OH2	TIP3	192	35.774	52.177	76.491	1.00
	35.11								
	ATOM	3227	H1	TIP3	192	35.764	53.126	76.478	1.00
	0.00								
25	ATOM	3228	H2	TIP3	192	35.764	51.926	75.558	1.00
	0.00								
	ATOM	3229	OH2	TIP3	193	14.266	18.832	81.850	1.00
	42.65								
30	ATOM	3230	H1	TIP3	193	14.506	19.737	82.028	1.00
	0.00								
	ATOM	3231	H2	TIP3	193	14.529	18.531	81.024	1.00
	0.00								
	ATOM	3232	OH2	TIP3	194	1.553	57.603	65.331	1.00
	40.28								
35	ATOM	3233	H1	TIP3	194	1.557	58.563	65.337	1.00
	0.00								
	ATOM	3234	H2	TIP3	194	1.557	57.368	64.404	1.00
	0.00								
40	ATOM	3235	OH2	TIP3	195	4.422	32.123	88.838	1.00
	32.17								
	ATOM	3236	H1	TIP3	195	4.416	33.067	88.833	1.00
	0.00								
	ATOM	3237	H2	TIP3	195	4.416	31.861	87.913	1.00
	0.00								
45	ATOM	3238	OH2	TIP3	196	14.003	45.749	53.783	1.00
	31.04								
	ATOM	3239	H1	TIP3	196	13.997	46.724	53.783	1.00
	0.00								
50	ATOM	3240	H2	TIP3	196	13.997	45.534	52.856	1.00
	0.00								
	ATOM	3241	OH2	TIP3	197	31.903	51.874	80.070	1.00
	28.31								
	ATOM	3242	H1	TIP3	197	31.894	52.799	80.038	1.00
	0.00								
55	ATOM	3243	H2	TIP3	197	31.902	51.577	79.144	1.00
	0.00								
	ATOM	3244	OH2	TIP3	198	7.885	33.930	71.780	1.00
	30.41								

	ATOM 0.00	3245	H1	TIP3	198	7.859	34.885	71.781	1.00
	ATOM 0.00	3246	H2	TIP3	198	7.859	33.686	70.856	1.00
5	ATOM 36.70	3247	OH2	TIP3	199	2.175	52.836	74.373	1.00
	ATOM 0.00	3248	H1	TIP3	199	2.210	53.787	74.386	1.00
10	ATOM 0.00	3249	H2	TIP3	199	2.209	52.586	73.455	1.00
	ATOM 37.76	3250	OH2	TIP3	200	27.709	21.730	94.653	1.00
	ATOM 0.00	3251	H1	TIP3	200	27.712	22.691	94.669	1.00
15	ATOM 0.00	3252	H2	TIP3	200	27.712	21.498	93.733	1.00
	ATOM 38.46	3253	OH2	TIP3	201	6.824	43.909	85.895	1.00
20	ATOM 0.00	3254	H1	TIP3	201	6.800	44.826	85.981	1.00
	ATOM 0.00	3255	H2	TIP3	201	6.797	43.646	85.033	1.00
	ATOM 36.70	3256	OH2	TIP3	202	41.467	40.084	77.723	1.00
25	ATOM 0.00	3257	H1	TIP3	202	41.162	40.956	77.648	1.00
	ATOM 0.00	3258	H2	TIP3	202	41.208	39.765	76.819	1.00
30	ATOM 33.76	3259	OH2	TIP3	203	38.042	58.700	67.769	1.00
	ATOM 0.00	3260	H1	TIP3	203	38.054	59.649	67.790	1.00
	ATOM 0.00	3261	H2	TIP3	203	38.054	58.449	66.854	1.00
35	ATOM 35.59	3262	OH2	TIP3	204	28.693	45.564	82.956	1.00
	ATOM 0.00	3263	H1	TIP3	204	28.704	46.525	82.980	1.00
40	ATOM 0.00	3264	H2	TIP3	204	28.704	45.329	82.041	1.00
	ATOM 21.86	3265	OH2	TIP3	205	11.506	37.834	80.089	1.00
	ATOM 0.00	3266	H1	TIP3	205	11.474	38.794	80.096	1.00
45	ATOM 0.00	3267	H2	TIP3	205	11.476	37.605	79.167	1.00
	ATOM 33.01	3268	OH2	TIP3	206	13.581	38.686	104.175	1.00
50	ATOM 0.00	3269	H1	TIP3	206	13.577	39.652	104.176	1.00
	ATOM 0.00	3270	H2	TIP3	206	13.577	38.461	103.247	1.00
	ATOM 36.71	3271	OH2	TIP3	207	6.466	43.750	66.221	1.00
55	ATOM 0.00	3272	H1	TIP3	207	6.485	44.742	66.266	1.00
	ATOM 0.00	3273	H2	TIP3	207	6.486	43.565	65.319	1.00

	ATOM	3274	OH2	TIP3	208	18.075	49.217	87.796	1.00
	33.12								
	ATOM	3275	H1	TIP3	208	18.046	50.173	87.776	1.00
	0.00								
5	ATOM	3276	H2	TIP3	208	18.044	48.989	86.865	1.00
	0.00								
	ATOM	3277	OH2	TIP3	209	28.496	52.689	58.003	1.00
	35.36								
10	ATOM	3278	H1	TIP3	209	28.443	53.649	58.016	1.00
	0.00								
	ATOM	3279	H2	TIP3	209	28.443	52.456	57.082	1.00
	0.00								
	ATOM	3280	OH2	TIP3	210	27.292	25.593	77.744	1.00
	34.42								
15	ATOM	3281	H1	TIP3	210	27.116	26.481	77.454	1.00
	0.00								
	ATOM	3282	H2	TIP3	210	27.146	25.341	76.779	1.00
	0.00								
	ATOM	3283	OH2	TIP3	211	33.979	35.777	78.853	1.00
20	32.89								
	ATOM	3284	H1	TIP3	211	34.015	36.734	78.857	1.00
	0.00								
	ATOM	3285	H2	TIP3	211	34.015	35.532	77.931	1.00
	0.00								
25	ATOM	3286	OH2	TIP3	212	31.242	60.948	81.668	1.00
	37.12								
	ATOM	3287	H1	TIP3	212	31.237	61.895	81.679	1.00
	0.00								
	ATOM	3288	H2	TIP3	212	31.237	60.693	80.747	1.00
30	0.00								
	ATOM	3289	OH2	TIP3	213	35.836	41.528	63.005	1.00
	34.19								
	ATOM	3290	H1	TIP3	213	35.833	42.482	63.033	1.00
	0.00								
35	ATOM	3291	H2	TIP3	213	35.833	41.285	62.095	1.00
	0.00								
	ATOM	3292	OH2	TIP3	214	-2.194	56.331	73.893	1.00
	36.04								
	ATOM	3293	H1	TIP3	214	-2.249	57.281	73.885	1.00
40	0.00								
	ATOM	3294	H2	TIP3	214	-2.249	56.080	72.965	1.00
	0.00								
	ATOM	3295	OH2	TIP3	215	3.099	32.353	85.937	1.00
	36.12								
45	ATOM	3296	H1	TIP3	215	3.140	33.324	85.937	1.00
	0.00								
	ATOM	3297	H2	TIP3	215	3.143	32.141	85.004	1.00
	0.00								
	ATOM	3298	OH2	TIP3	216	29.399	19.525	86.525	1.00
50	25.81								
	ATOM	3299	H1	TIP3	216	29.381	20.462	86.510	1.00
	0.00								
	ATOM	3300	H2	TIP3	216	29.381	19.255	85.591	1.00
	0.00								
55	ATOM	3301	OH2	TIP3	217	1.615	38.832	79.927	1.00
	28.39								
	ATOM	3302	H1	TIP3	217	1.622	39.783	79.929	1.00
	0.00								

	ATOM	3303	H2	TIP3	217	1.622	38.590	79.001	1.00
	0.00								
	ATOM	3304	OH2	TIP3	218	13.787	67.375	77.371	1.00
	34.53								
5	ATOM	3305	H1	TIP3	218	13.615	68.270	77.173	1.00
	0.00								
	ATOM	3306	H2	TIP3	218	13.746	67.162	76.418	1.00
	0.00								
10	ATOM	3307	OH2	TIP3	219	6.177	43.017	87.892	1.00
	32.18								
	ATOM	3308	H1	TIP3	219	6.255	44.059	87.926	1.00
	0.00								
	ATOM	3309	H2	TIP3	219	6.260	42.938	86.951	1.00
	0.00								
15	ATOM	3310	OH2	TIP3	220	28.330	71.277	79.038	1.00
	36.59								
	ATOM	3311	H1	TIP3	220	28.365	72.243	79.051	1.00
	0.00								
	ATOM	3312	H2	TIP3	220	28.365	71.051	78.116	1.00
	0.00								
20	ATOM	3313	OH2	TIP3	221	15.295	51.964	90.082	1.00
	35.46								
	ATOM	3314	H1	TIP3	221	15.297	52.918	90.087	1.00
	0.00								
25	ATOM	3315	H2	TIP3	221	15.297	51.720	89.159	1.00
	0.00								
	ATOM	3316	OH2	TIP3	222	42.721	36.930	69.137	1.00
	39.24								
30	ATOM	3317	H1	TIP3	222	42.697	37.900	69.138	1.00
	0.00								
	ATOM	3318	H2	TIP3	222	42.697	36.708	68.213	1.00
	0.00								
	ATOM	3319	OH2	TIP3	223	9.299	64.027	76.973	1.00
	34.30								
35	ATOM	3320	H1	TIP3	223	9.283	64.978	76.989	1.00
	0.00								
	ATOM	3321	H2	TIP3	223	9.283	63.775	76.057	1.00
	0.00								
	ATOM	3322	OH2	TIP3	224	-2.159	53.009	74.456	1.00
	34.50								
40	ATOM	3323	H1	TIP3	224	-2.107	53.964	74.446	1.00
	0.00								
	ATOM	3324	H2	TIP3	224	-2.107	52.770	73.521	1.00
	0.00								
45	ATOM	3325	OH2	TIP3	225	7.927	32.911	69.370	1.00
	39.25								
	ATOM	3326	H1	TIP3	225	7.900	33.886	69.362	1.00
	0.00								
	ATOM	3327	H2	TIP3	225	7.900	32.704	68.435	1.00
	0.00								
50	ATOM	3328	OH2	TIP3	226	35.674	33.002	69.346	1.00
	37.41								
	ATOM	3329	H1	TIP3	226	35.675	33.963	69.341	1.00
	0.00								
55	ATOM	3330	H2	TIP3	226	35.675	32.764	68.419	1.00
	0.00								
	ATOM	3331	OH2	TIP3	227	32.472	17.954	90.113	1.00
	36.48								



5	ATOM 0.00	3332	H1	TIP3	227	32.352	18.828	90.119	1.00
	ATOM 0.00	3333	H2	TIP3	227	32.363	17.557	89.235	1.00
	ATOM 32.84	3334	OH2	TIP3	228	27.207	69.701	74.202	1.00
	ATOM 0.00	3335	H1	TIP3	228	27.186	70.672	74.165	1.00
10	ATOM 0.00	3336	H2	TIP3	228	27.186	69.486	73.249	1.00
	ATOM 37.84	3337	OH2	TIP3	229	27.479	45.093	68.178	1.00
	ATOM 0.00	3338	H1	TIP3	229	27.483	46.021	68.187	1.00
	ATOM 0.00	3339	H2	TIP3	229	27.483	44.816	67.258	1.00
15	ATOM 37.92	3340	OH2	TIP3	230	37.205	56.043	73.914	1.00
	ATOM 0.00	3341	H1	TIP3	230	37.203	57.002	73.907	1.00
	ATOM 0.00	3342	H2	TIP3	230	37.203	55.806	72.981	1.00
	ATOM 38.85	3343	OH2	TIP3	231	22.304	43.438	86.120	1.00
25	ATOM 0.00	3344	H1	TIP3	231	22.302	44.395	86.117	1.00
	ATOM 0.00	3345	H2	TIP3	231	22.302	43.200	85.191	1.00
	ATOM 35.69	3346	OH2	TIP3	232	38.333	43.976	79.336	1.00
	ATOM 0.00	3347	H1	TIP3	232	38.328	44.928	79.294	1.00
30	ATOM 0.00	3348	H2	TIP3	232	38.328	43.733	78.380	1.00
	ATOM 28.36	3349	OH2	TIP3	233	16.867	67.376	66.645	1.00
	ATOM 0.00	3350	H1	TIP3	233	16.944	68.314	66.630	1.00
	ATOM 0.00	3351	H2	TIP3	233	16.944	67.108	65.715	1.00
40	ATOM 33.63	3352	OH2	TIP3	234	32.553	48.070	81.478	1.00
	ATOM 0.00	3353	H1	TIP3	234	32.529	49.029	81.495	1.00
	ATOM 0.00	3354	H2	TIP3	234	32.529	47.836	80.558	1.00
	ATOM 31.19	3355	OH2	TIP3	235	12.821	66.088	75.560	1.00
50	ATOM 0.00	3356	H1	TIP3	235	13.007	67.094	75.722	1.00
	ATOM 0.00	3357	H2	TIP3	235	13.078	66.048	74.679	1.00
	ATOM 35.24	3358	OH2	TIP3	236	6.843	46.881	60.307	1.00
	ATOM 0.00	3359	H1	TIP3	236	6.894	47.835	60.307	1.00
55	ATOM 0.00	3360	H2	TIP3	236	6.894	46.639	59.380	1.00

	ATOM	3361	OH2	TIP3	237	4.319	36.931	69.617	1.00
	38.31								
	ATOM	3362	H1	TIP3	237	4.340	37.876	69.583	1.00
	0.00								
5	ATOM	3363	H2	TIP3	237	4.340	36.678	68.670	1.00
	0.00								
	ATOM	3364	OH2	TIP3	238	31.461	33.832	65.405	1.00
	35.68								
10	ATOM	3365	H1	TIP3	238	31.412	34.791	65.419	1.00
	0.00								
	ATOM	3366	H2	TIP3	238	31.412	33.596	64.486	1.00
	0.00								
	ATOM	3367	OH2	TIP3	239	39.307	48.339	75.826	1.00
	25.00								
15	ATOM	3368	H1	TIP3	239	39.273	49.294	75.832	1.00
	0.00								
	ATOM	3369	H2	TIP3	239	39.273	48.095	74.910	1.00
	0.00								
	ATOM	3370	OH2	TIP3	240	32.144	39.954	63.110	1.00
20	36.62								
	ATOM	3371	H1	TIP3	240	32.196	40.964	63.098	1.00
	0.00								
	ATOM	3372	H2	TIP3	240	32.207	39.809	62.162	1.00
	0.00								
25	ATOM	3373	OH2	TIP3	241	38.953	39.819	77.372	1.00
	38.61								
	ATOM	3374	H1	TIP3	241	39.606	40.583	77.578	1.00
	0.00								
30	ATOM	3375	H2	TIP3	241	39.646	39.550	76.745	1.00
	0.00								
	ATOM	3376	OH2	TIP3	242	27.548	59.716	72.066	1.00
	38.18								
	ATOM	3377	H1	TIP3	242	27.587	60.647	71.978	1.00
	0.00								
35	ATOM	3378	H2	TIP3	242	27.512	59.450	71.210	1.00
	0.00								
	ATOM	3379	OH2	TIP3	243	23.904	22.756	95.445	1.00
	34.40								
40	ATOM	3380	H1	TIP3	243	23.928	23.706	95.440	1.00
	0.00								
	ATOM	3381	H2	TIP3	243	23.926	22.505	94.522	1.00
	0.00								
	ATOM	3382	OH2	TIP3	244	19.269	30.245	72.706	1.00
	32.40								
45	ATOM	3383	H1	TIP3	244	19.258	31.201	72.720	1.00
	0.00								
	ATOM	3384	H2	TIP3	244	19.256	30.019	71.792	1.00
	0.00								
50	ATOM	3385	OH2	TIP3	245	0.514	53.634	68.623	1.00
	34.70								
	ATOM	3386	H1	TIP3	245	0.583	54.583	68.603	1.00
	0.00								
	ATOM	3387	H2	TIP3	245	0.583	53.384	67.682	1.00
	0.00								
55	ATOM	3388	OH2	TIP3	246	13.727	42.324	91.224	1.00
	28.93								
	ATOM	3389	H1	TIP3	246	13.734	43.285	91.219	1.00
	0.00								

	ATOM 0.00	3390	H2	TIP3	246	13.734	42.085	90.295	1.00
	ATOM 35.21	3391	OH2	TIP3	247	12.121	26.078	76.245	1.00
5	ATOM 0.00	3392	H1	TIP3	247	12.115	27.032	76.248	1.00
	ATOM 0.00	3393	H2	TIP3	247	12.115	25.828	75.321	1.00
10	ATOM 41.37	3394	OH2	TIP3	248	26.635	27.093	75.402	1.00
	ATOM 0.00	3395	H1	TIP3	248	26.936	27.361	76.195	1.00
	ATOM 0.00	3396	H2	TIP3	248	26.916	26.154	75.197	1.00
15	ATOM 34.61	3397	OH2	TIP3	249	4.453	30.792	80.479	1.00
	ATOM 0.00	3398	H1	TIP3	249	4.440	31.767	80.478	1.00
	ATOM 0.00	3399	H2	TIP3	249	4.440	30.581	79.550	1.00
20	ATOM 34.69	3400	OH2	TIP3	250	10.746	21.117	93.065	1.00
	ATOM 0.00	3401	H1	TIP3	250	10.882	22.015	93.131	1.00
25	ATOM 0.00	3402	H2	TIP3	250	10.869	20.735	92.219	1.00
	ATOM 39.18	3403	OH2	TIP3	251	10.306	56.959	61.376	1.00
30	ATOM 0.00	3404	H1	TIP3	251	10.344	57.906	61.368	1.00
	ATOM 0.00	3405	H2	TIP3	251	10.344	56.703	60.446	1.00
	ATOM 30.45	3406	OH2	TIP3	252	19.639	44.893	88.642	1.00
35	ATOM 0.00	3407	H1	TIP3	252	19.629	45.858	88.629	1.00
	ATOM 0.00	3408	H2	TIP3	252	19.629	44.668	87.710	1.00
	ATOM 34.86	3409	OH2	TIP3	253	15.407	18.715	83.978	1.00
40	ATOM 0.00	3410	H1	TIP3	253	15.292	19.676	83.830	1.00
	ATOM 0.00	3411	H2	TIP3	253	15.355	18.477	83.021	1.00
45	ATOM 31.02	3412	OH2	TIP3	254	9.191	21.414	89.085	1.00
	ATOM 0.00	3413	H1	TIP3	254	9.127	22.355	89.110	1.00
	ATOM 0.00	3414	H2	TIP3	254	9.127	21.152	88.178	1.00
50	ATOM 35.28	3415	OH2	TIP3	255	7.949	25.146	81.387	1.00
	ATOM 0.00	3416	H1	TIP3	255	8.094	26.095	81.404	1.00
55	ATOM 0.00	3417	H2	TIP3	255	8.095	24.899	80.472	1.00
	ATOM 35.59	3418	OH2	TIP3	256	34.958	38.845	65.354	1.00

	ATOM	3419	H1	TIP3	256	35.003	39.804	65.364	1.00
	0.00								
	ATOM	3420	H2	TIP3	256	35.003	38.611	64.433	1.00
	0.00								
5	ATOM	3421	S	SO4	901	20.174	32.731	69.351	1.00
	8.88								
	ATOM	3422	O1	SO4	901	19.784	32.048	70.522	1.00
	8.66								
10	ATOM	3423	O2	SO4	901	19.008	33.195	68.633	1.00
	9.59								
	ATOM	3424	O3	SO4	901	20.991	33.872	69.811	1.00
	8.42								
	ATOM	3425	O4	SO4	901	20.949	31.837	68.511	1.00
	7.06								
15	ATOM	3426	S	SO4	902	39.464	37.832	73.382	1.00
	27.67								
	ATOM	3427	O1	SO4	902	38.570	36.649	73.306	1.00
	28.54								
	ATOM	3428	O2	SO4	902	40.301	37.833	72.264	1.00
20	26.97								
	ATOM	3429	O3	SO4	902	38.647	39.016	73.378	1.00
	26.59								
	ATOM	3430	O4	SO4	902	40.168	37.757	74.605	1.00
	27.31								
25	ATOM	3431	S	SO4	903	14.908	66.477	81.070	1.00
	38.89								
	ATOM	3432	O1	SO4	903	14.636	65.291	80.341	1.00
	39.87								
30	ATOM	3433	O2	SO4	903	13.849	67.449	80.942	1.00
	36.71								
	ATOM	3434	O3	SO4	903	15.068	66.086	82.452	1.00
	37.21								
	ATOM	3435	O4	SO4	903	16.095	67.021	80.519	1.00
	37.74								
35	ATOM	3436	PA	ANP	1	24.843	41.888	87.844	1.00
	36.02								
	ATOM	3437	O1A	ANP	1	25.011	41.910	89.325	1.00
	36.27								
40	ATOM	3438	O2A	ANP	1	23.696	41.181	87.286	1.00
	35.82								
	ATOM	3439	O5'	ANP	1	26.156	41.369	87.121	1.00
	33.31								
	ATOM	3440	PB	ANP	1	25.987	44.266	86.647	1.00
	39.59								
45	ATOM	3441	O1B	ANP	1	25.401	45.114	85.567	1.00
	38.23								
	ATOM	3442	O2B	ANP	1	27.095	43.375	86.202	1.00
	38.97								
	ATOM	3443	O3A	ANP	1	24.871	43.380	87.281	1.00
50	37.26								
	ATOM	3444	N3B	ANP	1	26.461	45.182	87.959	1.00
	39.82								
	ATOM	3445	C5'	ANP	1	26.998	40.244	87.427	1.00
	26.07								
55	ATOM	3446	C4'	ANP	1	28.014	39.742	86.376	1.00
	22.40								
	ATOM	3447	O4'	ANP	1	27.341	38.582	85.846	1.00
	19.19								

	ATOM	3448	C1'	ANP	1	27.387	38.523	84.444	1.00
	16.95								
	ATOM	3449	N9	ANP	1	26.155	37.856	84.043	1.00
	13.25								
5	ATOM	3450	C4	ANP	1	26.003	36.800	83.169	1.00
	12.39								
	ATOM	3451	N3	ANP	1	26.965	36.131	82.438	1.00
	12.21								
10	ATOM	3452	C2	ANP	1	26.415	35.218	81.670	1.00
	11.33								
	ATOM	3453	N1	ANP	1	25.126	34.826	81.608	1.00
	10.92								
	ATOM	3454	C6	ANP	1	24.208	35.502	82.313	1.00
	11.51								
15	ATOM	3455	N6	ANP	1	22.907	35.158	82.165	1.00
	11.52								
	ATOM	3456	C5	ANP	1	24.660	36.530	83.164	1.00
	11.58								
	ATOM	3457	N7	ANP	1	23.970	37.331	84.013	1.00
20	12.95								
	ATOM	3458	C8	ANP	1	24.912	38.111	84.535	1.00
	13.45								
	ATOM	3459	C2'	ANP	1	27.341	39.966	84.103	1.00
	19.66								
25	ATOM	3460	O2'	ANP	1	27.631	40.027	82.675	1.00
	20.41								
	ATOM	3461	C3'	ANP	1	28.385	40.520	85.098	1.00
	20.48								
30	ATOM	3462	O3'	ANP	1	29.565	40.300	84.242	1.00
	22.85								
	ATOM	3463	C1	DTT	1	17.791	37.806	84.959	1.00
	22.39								
	ATOM	3464	C2	DTT	1	17.633	38.191	83.500	1.00
	23.33								
35	ATOM	3465	O3	DTT	1	18.918	38.534	82.973	1.00
	22.44								
	ATOM	3466	O6	DTT	1	18.197	38.939	85.755	1.00
	24.18								
40	END								

Table 4  
Coordinates of Lck bound with staurosporine (soaked)

5	B	Atom				X	Y	Z	Occ
		Type	Res	#					
		ATOM	1 CB	LYS	231	1.760	26.587	89.190	1.00
		18.15							
10		ATOM	2 CG	LYS	231	0.804	26.486	88.016	1.00
		19.78							
		ATOM	3 CD	LYS	231	1.297	25.440	87.044	1.00
		21.94							
15		ATOM	4 CE	LYS	231	0.737	25.667	85.678	1.00
		21.71							
		ATOM	5 NZ	LYS	231	1.363	24.735	84.727	1.00
		25.80							
		ATOM	9 C	LYS	231	2.208	27.249	91.505	1.00
		16.44							
20		ATOM	10 O	LYS	231	3.298	27.799	91.498	1.00
		16.57							
		ATOM	13 N	LYS	231	1.232	28.896	89.968	1.00
		18.23							
25		ATOM	15 CA	LYS	231	1.255	27.440	90.349	1.00
		17.63							
		ATOM	16 N	PRO	232	1.814	26.446	92.511	1.00
		16.47							
		ATOM	17 CD	PRO	232	0.580	25.644	92.633	1.00
		16.83							
30		ATOM	18 CA	PRO	232	2.697	26.208	93.656	1.00
		15.75							
		ATOM	19 CB	PRO	232	1.854	25.276	94.530	1.00
		16.74							
35		ATOM	20 CG	PRO	232	1.031	24.515	93.519	1.00
		16.11							
		ATOM	21 C	PRO	232	3.957	25.516	93.146	1.00
		15.08							
		ATOM	22 O	PRO	232	3.914	24.803	92.155	1.00
		11.56							
40		ATOM	23 N	TRP	233	5.061	25.660	93.878	1.00
		14.93							
		ATOM	25 CA	TRP	233	6.315	25.098	93.442	1.00
		15.30							
45		ATOM	26 CB	TRP	233	7.432	25.348	94.482	1.00
		16.73							
		ATOM	27 CG	TRP	233	7.278	24.559	95.770	1.00
		15.82							
		ATOM	28 CD2	TRP	233	7.695	23.204	96.006	1.00
		16.47							
50		ATOM	29 CE2	TRP	233	7.336	22.873	97.331	1.00
		16.40							
		ATOM	30 CE3	TRP	233	8.344	22.232	95.222	1.00
		16.08							
		ATOM	31 CD1	TRP	233	6.707	24.989	96.926	1.00
55		15.21							
		ATOM	32 NE1	TRP	233	6.741	23.982	97.877	1.00
		15.51							
		ATOM	34 C22	TRP	233	7.590	21.615	97.898	1.00
		17.54							

5	ATOM 16.04	35	CZ3	TRP	233	8.600	20.980	95.785	1.00
	ATOM 17.08	36	CH2	TRP	233	8.217	20.684	97.112	1.00
	ATOM 15.78	37	C	TRP	233	6.272	23.631	93.062	1.00
	ATOM 16.43	38	O	TRP	233	6.950	23.237	92.114	1.00
10	ATOM 14.38	39	N	TRP	234	5.431	22.844	93.739	1.00
	ATOM 15.29	41	CA	TRP	234	5.354	21.401	93.463	1.00
	ATOM 13.76	42	CB	TRP	234	4.686	20.603	94.620	1.00
	ATOM 11.08	43	CG	TRP	234	3.293	21.032	94.983	1.00
15	ATOM 12.03	44	CD2	TRP	234	2.904	21.976	96.002	1.00
	ATOM 11.40	45	CE2	TRP	234	1.497	22.087	95.950	1.00
	ATOM 13.92	46	CE3	TRP	234	3.610	22.756	96.923	1.00
	ATOM 12.07	47	CD1	TRP	234	2.146	20.610	94.399	1.00
20	ATOM 11.51	48	NE1	TRP	234	1.067	21.234	94.965	1.00
	ATOM 13.55	50	CZ2	TRP	234	0.765	22.914	96.804	1.00
	ATOM 14.90	51	CZ3	TRP	234	2.886	23.596	97.785	1.00
	ATOM 13.08	52	CH2	TRP	234	1.464	23.677	97.705	1.00
25	ATOM 15.90	53	C	TRP	234	4.718	21.054	92.135	1.00
	ATOM 15.35	54	O	TRP	234	4.763	19.905	91.708	1.00
	ATOM 16.06	55	N	GLU	235	4.076	22.030	91.508	1.00
	ATOM 17.45	57	CA	GLU	235	3.483	21.823	90.182	1.00
30	ATOM 18.24	58	CB	GLU	235	1.978	22.133	90.187	1.00
	ATOM 20.36	59	CG	GLU	235	1.124	21.155	90.988	1.00
	ATOM 23.76	60	CD	GLU	235	-0.372	21.423	90.895	1.00
	ATOM 25.31	61	OE1	GLU	235	-0.814	22.410	90.254	1.00
35	ATOM 23.55	62	OE2	GLU	235	-1.122	20.611	91.457	1.00
	ATOM 17.15	63	C	GLU	235	4.134	22.720	89.138	1.00
	ATOM 18.56	64	O	GLU	235	3.820	22.648	87.952	1.00
	ATOM 16.90	65	N	ASP	236	4.949	23.646	89.619	1.00
40	ATOM 15.75	67	CA	ASP	236	5.608	24.611	88.736	1.00

5	ATOM 16.17	68	CB	ASP	236	6.242	25.697	89.608	1.00
	ATOM 18.56	69	CG	ASP	236	6.798	26.867	88.800	1.00
	ATOM 17.21	70	OD1	ASP	236	6.726	26.899	87.570	1.00
	ATOM 19.46	71	OD2	ASP	236	7.326	27.820	89.384	1.00
	ATOM 15.80	72	C	ASP	236	6.651	23.950	87.841	1.00
10	ATOM 13.78	73	O	ASP	236	7.690	23.480	88.298	1.00
	ATOM 14.20	74	N	ALA	237	6.393	23.961	86.543	1.00
	ATOM 15.78	76	CA	ALA	237	7.356	23.384	85.605	1.00
15	ATOM 15.97	77	CB	ALA	237	6.829	23.514	84.163	1.00
	ATOM 14.92	78	C	ALA	237	8.752	24.012	85.721	1.00
	ATOM 14.31	79	O	ALA	237	9.723	23.383	85.391	1.00
20	ATOM 12.87	80	N	TRP	238	8.840	25.236	86.253	1.00
	ATOM 13.04	82	CA	TRP	238	10.129	25.922	86.425	1.00
	ATOM 15.24	83	CB	TRP	238	9.954	27.442	86.287	1.00
25	ATOM 20.51	84	CG	TRP	238	10.073	27.900	84.882	1.00
	ATOM 22.57	85	CD2	TRP	238	9.031	28.268	84.008	1.00
	ATOM 23.44	86	CE2	TRP	238	9.588	28.593	82.759	1.00
30	ATOM 23.00	87	CE3	TRP	238	7.634	28.388	84.155	1.00
	ATOM 19.47	88	CD1	TRP	238	11.235	28.000	84.145	1.00
	ATOM 21.43	89	NE1	TRP	238	10.968	28.401	82.876	1.00
35	ATOM 24.52	91	CZ2	TRP	238	8.864	28.997	81.674	1.00
	ATOM 25.91	92	CZ3	TRP	238	6.907	28.782	83.099	1.00
	ATOM 27.33	93	CH2	TRP	238	7.506	29.101	81.866	1.00
40	ATOM 12.20	94	C	TRP	238	10.953	25.631	87.693	1.00
	ATOM 12.35	95	O	TRP	238	12.176	25.908	87.733	1.00
	ATOM 10.34	96	N	GLU	239	10.315	25.146	88.747	1.00
45	ATOM 10.08	98	CA	GLU	239	11.049	24.844	89.979	1.00
	ATOM 9.78	99	CB	GLU	239	10.073	24.461	91.128	1.00
	ATOM 11.32	100	CG	GLU	239	10.736	24.336	92.513	1.00



	ATOM	101	CD	GLU	239	10.896	25.689	93.246	1.00
	11.67								
	ATOM	102	OE1	GLU	239	10.190	26.651	92.913	1.00
	11.98								
5	ATOM	103	OE2	GLU	239	11.718	25.788	94.189	1.00
	13.38								
	ATOM	104	C	GLU	239	12.012	23.677	89.790	1.00
	9.39								
10	ATOM	105	O	GLU	239	11.657	22.701	89.136	1.00
	10.05								
	ATOM	106	N	VAL	240	13.243	23.818	90.267	1.00
	9.86								
	ATOM	108	CA	VAL	240	14.189	22.719	90.244	1.00
	10.68								
15	ATOM	109	CB	VAL	240	15.369	22.907	89.192	1.00
	12.91								
	ATOM	110	CG1	VAL	240	14.833	22.947	87.766	1.00
	13.06								
20	ATOM	111	CG2	VAL	240	16.212	24.189	89.520	1.00
	12.60								
	ATOM	112	C	VAL	240	14.832	22.564	91.629	1.00
	12.37								
	ATOM	113	O	VAL	240	15.017	23.557	92.355	1.00
	11.55								
25	ATOM	114	N	PRO	241	15.155	21.317	92.027	1.00
	12.09								
	ATOM	115	CD	PRO	241	14.718	20.058	91.401	1.00
	12.63								
30	ATOM	116	CA	PRO	241	15.799	21.069	93.321	1.00
	12.13								
	ATOM	117	CB	PRO	241	15.978	19.546	93.314	1.00
	12.25								
	ATOM	118	CG	PRO	241	14.760	19.070	92.581	1.00
	14.30								
35	ATOM	119	C	PRO	241	17.156	21.771	93.244	1.00
	12.10								
	ATOM	120	O	PRO	241	17.823	21.782	92.183	1.00
	8.60								
40	ATOM	121	N	ARG	242	17.579	22.372	94.352	1.00
	11.24								
	ATOM	123	CA	ARG	242	18.835	23.085	94.383	1.00
	13.70								
	ATOM	124	CB	ARG	242	18.987	23.859	95.694	1.00
	14.96								
45	ATOM	125	CG	ARG	242	20.154	24.871	95.692	1.00
	21.92								
	ATOM	126	CD	ARG	242	20.611	25.208	97.126	1.00
	26.26								
50	ATOM	127	NE	ARG	242	19.454	25.535	97.957	1.00
	31.84								
	ATOM	129	CZ	ARG	242	18.881	26.725	97.964	1.00
	31.27								
	ATOM	130	NH1	ARG	242	19.384	27.680	97.214	1.00
	33.78								
55	ATOM	133	NH2	ARG	242	17.727	26.903	98.588	1.00
	34.79								
	ATOM	136	C	ARG	242	20.053	22.179	94.124	1.00
	14.87								

5	ATOM 13.69	137	O	ARG	242	21.111	22.641	93.681	1.00
	ATOM 12.60	138	N	GLU	243	19.852	20.878	94.327	1.00
	ATOM 15.16	140	CA	GLU	243	20.879	19.857	94.087	1.00
	ATOM 15.64	141	CB	GLU	243	20.359	18.482	94.537	1.00
	ATOM 21.87	142	CG	GLU	243	20.243	18.312	96.035	1.00
10	ATOM 24.48	143	CD	GLU	243	19.087	19.087	96.647	1.00
	ATOM 24.61	144	OE1	GLU	243	18.067	19.266	95.960	1.00
	ATOM 27.96	145	OE2	GLU	243	19.190	19.482	97.840	1.00
15	ATOM 14.70	146	C	GLU	243	21.282	19.754	92.604	1.00
	ATOM 14.38	147	O	GLU	243	22.346	19.229	92.259	1.00
	ATOM 13.51	148	N	THR	244	20.411	20.220	91.718	1.00
	ATOM 12.07	150	CA	THR	244	20.699	20.168	90.280	1.00
25	ATOM 10.75	151	CB	THR	244	19.385	20.374	89.418	1.00
	ATOM 10.55	152	OG1	THR	244	18.888	21.707	89.565	1.00
	ATOM 13.15	154	CG2	THR	244	18.290	19.402	89.858	1.00
30	ATOM 10.76	155	C	THR	244	21.760	21.199	89.833	1.00
	ATOM 10.97	156	O	THR	244	22.269	21.168	88.705	1.00
	ATOM 8.88	157	N	LEU	245	22.148	22.077	90.746	1.00
35	ATOM 9.31	159	CA	LEU	245	23.061	23.165	90.379	1.00
	ATOM 10.49	160	CB	LEU	245	22.368	24.506	90.651	1.00
	ATOM 11.43	161	CG	LEU	245	20.914	24.742	90.150	1.00
	ATOM 13.57	162	CD1	LEU	245	20.382	26.019	90.797	1.00
45	ATOM 11.87	163	CD2	LEU	245	20.877	24.853	88.650	1.00
	ATOM 10.95	164	C	LEU	245	24.393	23.193	91.083	1.00
	ATOM 9.05	165	O	LEU	245	24.495	22.971	92.300	1.00
50	ATOM 10.85	166	N	LYS	246	25.416	23.518	90.317	1.00
	ATOM 13.86	168	CA	LYS	246	26.762	23.622	90.837	1.00
	ATOM 15.07	169	CB	LYS	246	27.611	22.471	90.288	1.00
55	ATOM 22.47	170	CG	LYS	246	29.054	22.496	90.773	1.00

5	ATOM 27.84	171	CD	LYS	246	29.873	21.474	89.971	1.00
	ATOM 30.47	172	CE	LYS	246	31.201	21.130	90.636	1.00
	ATOM 34.63	173	NZ	LYS	246	31.003	20.227	91.823	1.00
	ATOM 12.07	177	C	LYS	246	27.311	24.958	90.362	1.00
10	ATOM 14.04	178	O	LYS	246	27.438	25.151	89.148	1.00
	ATOM 10.03	179	N	LEU	247	27.550	25.878	91.299	0.60
15	ATOM 10.15	181	CA	LEU	247	28.062	27.225	91.030	0.60
	ATOM 9.32	182	CB	LEU	247	27.574	28.203	92.116	0.60
	ATOM 10.50	183	CG	LEU	247	26.175	28.846	92.001	0.60
20	ATOM 10.50	184	CD1	LEU	247	25.107	27.817	91.828	0.60
	ATOM 10.58	185	CD2	LEU	247	25.882	29.702	93.248	0.60
25	ATOM 10.90	186	C	LEU	247	29.587	27.226	90.925	0.60
	ATOM 9.54	187	O	LEU	247	30.281	26.783	91.830	0.60
	ATOM 12.69	188	N	VAL	248	30.106	27.705	89.803	1.00
30	ATOM 15.63	190	CA	VAL	248	31.547	27.639	89.569	1.00
	ATOM 16.91	191	CB	VAL	248	31.834	26.802	88.298	1.00
35	ATOM 18.84	192	CG1	VAL	248	33.337	26.609	88.100	1.00
	ATOM 15.03	193	CG2	VAL	248	31.163	25.438	88.418	1.00
	ATOM 16.65	194	C	VAL	248	32.328	28.947	89.556	1.00
40	ATOM 19.01	195	O	VAL	248	33.435	28.985	90.045	1.00
	ATOM 16.72	196	N	GLU	249	31.759	30.034	89.046	1.00
45	ATOM 16.72	198	CA	GLU	249	32.487	31.279	88.985	1.00
	ATOM 20.55	199	CB	GLU	249	33.278	31.332	87.659	1.00
	ATOM 26.95	200	CG	GLU	249	34.366	32.418	87.599	1.00
50	ATOM 29.78	201	CD	GLU	249	34.777	32.796	86.158	1.00
	ATOM 32.71	202	OE1	GLU	249	34.916	31.893	85.301	1.00
	ATOM 31.08	203	OE2	GLU	249	34.963	34.003	85.879	1.00
55	ATOM 16.18	204	C	GLU	249	31.556	32.484	89.066	1.00
	ATOM 14.44	205	O	GLU	249	30.524	32.519	88.422	1.00

5	ATOM 14.75	206	N	ARG	250	31.958	33.498	89.826	1.00
	ATOM 16.31	208	CA	ARG	250	31.149	34.697	89.970	1.00
	ATOM 18.34	209	CB	ARG	250	31.586	35.481	91.206	1.00
	ATOM 24.42	210	CG	ARG	250	30.578	36.542	91.602	1.00
	ATOM 29.12	211	CD	ARG	250	30.650	36.833	93.108	1.00
10	ATOM 34.21	212	NE	ARG	250	32.020	37.004	93.581	1.00
	ATOM 38.12	214	CZ	ARG	250	32.474	36.540	94.752	1.00
	ATOM 38.43	215	NH1	ARG	250	31.658	35.886	95.591	1.00
15	ATOM 38.12	218	NH2	ARG	250	33.760	36.673	95.064	1.00
	ATOM 13.14	221	C	ARG	250	31.216	35.590	88.737	1.00
	ATOM 13.08	222	O	ARG	250	32.285	35.858	88.232	1.00
20	ATOM 12.68	223	N	LEU	251	30.062	35.972	88.205	1.00
	ATOM 20.00	224	H	LEU	251	29.248	35.608	88.573	1.00
	ATOM 11.57	225	CA	LEU	251	30.012	36.833	87.024	1.00
25	ATOM 10.45	226	CB	LEU	251	28.920	36.356	86.071	1.00
	ATOM 10.47	227	CG	LEU	251	29.000	34.881	85.622	1.00
	ATOM 10.51	228	CD1	LEU	251	27.692	34.513	84.926	1.00
30	ATOM 9.63	229	CD2	LEU	251	30.194	34.549	84.674	1.00
	ATOM 12.84	230	C	LEU	251	29.757	38.290	87.354	1.00
	ATOM 12.85	231	O	LEU	251	30.110	39.141	86.586	1.00
35	ATOM 14.06	232	N	GLY	252	29.043	38.534	88.454	1.00
	ATOM 16.48	234	CA	GLY	252	28.697	39.889	88.879	1.00
	ATOM 18.50	235	C	GLY	252	28.247	39.871	90.337	1.00
40	ATOM 18.48	236	O	GLY	252	27.860	38.831	90.871	1.00
	ATOM 20.36	237	N	ALA	253	28.377	40.997	91.032	1.00
	ATOM 22.25	239	CA	ALA	253	27.977	41.046	92.430	1.00
45	ATOM 22.29	240	CB	ALA	253	29.170	40.793	93.359	1.00
	ATOM 24.41	241	C	ALA	253	27.333	42.364	92.753	1.00
	ATOM 25.47	242	O	ALA	253	27.654	43.386	92.154	1.00

5	ATOM 24.62	243	N	GLY	254	26.457	42.365	93.744	1.00
	ATOM 25.95	245	CA	GLY	254	25.782	43.592	94.068	1.00
	ATOM 25.48	246	C	GLY	254	25.166	43.611	95.431	1.00
	ATOM 25.92	247	O	GLY	254	25.350	42.700	96.222	1.00
10	ATOM 26.31	248	N	GLN	255	24.527	44.737	95.722	1.00
	ATOM 26.64	250	CA	GLN	255	23.874	44.957	96.998	1.00
	ATOM 29.75	251	CB	GLN	255	23.446	46.419	97.064	1.00
	ATOM 34.10	252	CG	GLN	255	22.747	46.856	98.322	1.00
15	ATOM 36.38	253	CD	GLN	255	22.017	48.171	98.121	1.00
	ATOM 38.79	254	OE1	GLN	255	21.131	48.519	98.905	1.00
	ATOM 36.30	255	NE2	GLN	255	22.362	48.896	97.053	1.00
	ATOM 25.12	258	C	GLN	255	22.682	44.026	97.195	1.00
20	ATOM 25.75	259	O	GLN	255	22.359	43.641	98.325	1.00
	ATOM 22.09	260	N	ALA	256	22.090	43.594	96.077	1.00
	ATOM 20.00	261	H	ALA	256	22.487	43.881	95.233	1.00
	ATOM 21.90	262	CA	ALA	256	20.935	42.685	96.077	1.00
25	ATOM 20.60	263	CB	ALA	256	19.911	43.108	94.982	1.00
	ATOM 19.44	264	C	ALA	256	21.291	41.210	95.867	1.00
	ATOM 15.55	265	O	ALA	256	20.440	40.347	95.964	1.00
	ATOM 18.47	266	N	GLY	257	22.552	40.934	95.517	1.00
30	ATOM 16.24	268	CA	GLY	257	22.937	39.558	95.310	1.00
	ATOM 15.18	269	C	GLY	257	24.099	39.430	94.354	1.00
	ATOM 13.21	270	O	GLY	257	24.812	40.409	94.037	1.00
	ATOM 13.24	271	N	GLU	258	24.241	38.212	93.832	1.00
35	ATOM 13.69	273	CA	GLU	258	25.292	37.891	92.911	1.00
	ATOM 14.93	274	CB	GLU	258	26.321	37.003	93.639	1.00
	ATOM 19.82	275	CG	GLU	258	26.843	37.599	94.953	1.00
	ATOM 21.99	276	CD	GLU	258	28.028	36.822	95.491	1.00
55	ATOM 22.59	277	OE1	GLU	258	27.927	35.579	95.638	1.00

	ATOM 23.01	278	OE2	GLU	258	29.072	37.457	95.699	1.00
	ATOM 12.11	279	C	GLU	258	24.742	37.130	91.709	1.00
5	ATOM 12.35	280	O	GLU	258	23.557	36.707	91.717	1.00
	ATOM 9.59	281	N	VAL	259	25.577	36.995	90.694	1.00
10	ATOM 20.00	282	H	VAL	259	26.474	37.374	90.786	1.00
	ATOM 10.11	283	CA	VAL	259	25.275	36.217	89.519	1.00
	ATOM 11.85	284	CB	VAL	259	24.980	37.045	88.216	1.00
15	ATOM 9.66	285	CG1	VAL	259	24.607	36.055	87.038	1.00
	ATOM 10.23	286	CG2	VAL	259	23.823	38.034	88.430	1.00
20	ATOM 10.60	287	C	VAL	259	26.500	35.388	89.299	1.00
	ATOM 10.25	288	O	VAL	259	27.644	35.919	89.313	1.00
	ATOM 9.34	289	N	TRP	260	26.279	34.089	89.199	1.00
25	ATOM 9.50	291	CA	TRP	260	27.307	33.090	89.022	1.00
	ATOM 10.92	292	CB	TRP	260	27.269	32.103	90.194	1.00
30	ATOM 12.43	293	CG	TRP	260	27.761	32.642	91.486	1.00
	ATOM 12.30	294	CD2	TRP	260	29.008	32.329	92.089	1.00
	ATOM 14.82	295	CE2	TRP	260	29.119	33.128	93.248	1.00
35	ATOM 14.96	296	CE3	TRP	260	30.071	31.488	91.758	1.00
	ATOM 13.18	297	CD1	TRP	260	27.135	33.529	92.281	1.00
40	ATOM 17.08	298	NE1	TRP	260	27.947	33.832	93.362	1.00
	ATOM 17.64	300	CZ2	TRP	260	30.238	33.081	94.093	1.00
	ATOM 16.99	301	CZ3	TRP	260	31.199	31.429	92.613	1.00
45	ATOM 14.69	302	CH2	TRP	260	31.273	32.246	93.745	1.00
	ATOM 9.88	303	C	TRP	260	27.080	32.231	87.800	1.00
50	ATOM 8.95	304	O	TRP	260	25.944	31.967	87.419	1.00
	ATOM 8.87	305	N	MET	261	28.163	31.821	87.161	1.00
	ATOM 10.46	307	CA	MET	261	28.038	30.878	86.085	1.00
55	ATOM 12.42	308	CB	MET	261	29.247	30.988	85.136	1.00
	ATOM 16.57	309	CG	MET	261	29.262	29.954	83.987	1.00

5	ATOM 22.32	310	SD	MET	261	30.294	28.517	84.361	1.00
	ATOM 23.08	311	CE	MET	261	29.294	27.235	83.989	1.00
	ATOM 9.83	312	C	MET	261	28.056	29.525	86.781	1.00
	ATOM 9.64	313	O	MET	261	28.834	29.330	87.742	1.00
10	ATOM 8.72	314	N	GLY	262	27.208	28.607	86.341	1.00
	ATOM 11.89	316	CA	GLY	262	27.166	27.301	86.966	1.00
	ATOM 10.57	317	C	GLY	262	26.724	26.246	85.969	1.00
15	ATOM 9.80	318	O	GLY	262	26.624	26.513	84.758	1.00
	ATOM 9.01	319	N	TYR	263	26.497	25.042	86.465	1.00
20	ATOM 11.02	321	CA	TYR	263	26.035	23.960	85.621	1.00
	ATOM 12.51	322	CB	TYR	263	27.097	22.855	85.485	1.00
	ATOM 14.55	323	CG	TYR	263	28.293	23.213	84.655	1.00
25	ATOM 18.08	324	CD1	TYR	263	29.438	23.724	85.239	1.00
	ATOM 20.09	325	CE1	TYR	263	30.546	24.079	84.461	1.00
30	ATOM 18.00	326	CD2	TYR	263	28.269	23.049	83.277	1.00
	ATOM 19.77	327	CE2	TYR	263	29.333	23.398	82.502	1.00
35	ATOM 21.42	328	CZ	TYR	263	30.472	23.907	83.085	1.00
	ATOM 23.89	329	OH	TYR	263	31.509	24.270	82.257	1.00
	ATOM 10.30	331	C	TYR	263	24.802	23.330	86.196	1.00
40	ATOM 9.29	332	O	TYR	263	24.747	23.067	87.393	1.00
	ATOM 9.14	333	N	TYR	264	23.829	23.092	85.327	1.00
45	ATOM 9.25	335	CA	TYR	264	22.598	22.418	85.668	1.00
	ATOM 8.14	336	CB	TYR	264	21.389	23.039	84.904	1.00
	ATOM 8.30	337	CG	TYR	264	20.125	22.250	85.107	1.00
50	ATOM 9.38	338	CD1	TYR	264	19.414	22.336	86.296	1.00
	ATOM 10.86	339	CE1	TYR	264	18.277	21.535	86.521	1.00
55	ATOM 10.42	340	CD2	TYR	264	19.660	21.345	84.113	1.00
	ATOM 11.07	341	CE2	TYR	264	18.504	20.541	84.338	1.00
	ATOM 11.93	342	CZ	TYR	264	17.818	20.667	85.546	1.00

	ATOM	343	OH	TYR	264	16.644	19.967	85.764	1.00
	12.25								
	ATOM	345	C	TYR	264	22.755	20.991	85.244	1.00
	7.93								
5	ATOM	346	O	TYR	264	23.097	20.730	84.084	1.00
	7.75								
	ATOM	347	N	ASN	265	22.556	20.068	86.177	1.00
	8.78								
10	ATOM	349	CA	ASN	265	22.656	18.630	85.940	1.00
	7.73								
	ATOM	350	CB	ASN	265	21.432	18.107	85.138	1.00
	9.37								
	ATOM	351	CG	ASN	265	20.195	17.820	86.027	1.00
	10.68								
15	ATOM	352	OD1	ASN	265	19.201	17.236	85.555	1.00
	14.15								
	ATOM	353	ND2	ASN	265	20.277	18.151	87.295	1.00
	6.80								
	ATOM	356	C	ASN	265	23.976	18.213	85.297	1.00
	7.98								
20	ATOM	357	O	ASN	265	24.000	17.505	84.261	1.00
	7.72								
	ATOM	358	N	GLY	266	25.043	18.836	85.810	1.00
	6.07								
25	ATOM	360	CA	GLY	266	26.401	18.561	85.350	1.00
	7.41								
	ATOM	361	C	GLY	266	26.851	19.058	83.986	1.00
	7.01								
30	ATOM	362	O	GLY	266	27.974	19.487	83.871	1.00
	9.23								
	ATOM	363	N	HIS	267	25.968	19.138	83.003	0.49
	2.00								
	ATOM	365	CA	HIS	267	26.385	19.498	81.649	0.49
	2.00								
35	ATOM	366	CB	HIS	267	25.879	18.404	80.711	0.49
	2.00								
	ATOM	367	CG	HIS	267	26.427	17.062	81.012	0.49
	2.00								
40	ATOM	368	CD2	HIS	267	25.850	15.925	81.413	0.49
	2.00								
	ATOM	369	ND1	HIS	267	27.795	16.791	80.933	0.49
	2.00								
	ATOM	371	CE1	HIS	267	27.995	15.546	81.278	0.49
	2.00								
45	ATOM	372	NE2	HIS	267	26.840	14.982	81.578	0.49
	2.00								
	ATOM	374	C	HIS	267	25.966	20.815	81.027	0.49
	2.09								
	ATOM	375	O	HIS	267	26.543	21.266	80.034	0.49
	2.00								
50	ATOM	376	N	THR	268	24.935	21.423	81.586	1.00
	4.73								
	ATOM	377	H	THR	268	24.525	21.095	82.409	1.00
	20.00								
55	ATOM	378	CA	THR	268	24.404	22.625	80.944	1.00
	5.55								
	ATOM	379	CB	THR	268	22.859	22.525	80.846	1.00
	7.68								



5	ATOM 9.02	380	OG1	THR	268	22.512	21.310	80.149	1.00
	ATOM 5.22	382	CG2	THR	268	22.274	23.755	80.100	1.00
	ATOM 6.63	383	C	THR	268	24.803	23.892	81.652	1.00
	ATOM 6.37	384	O	THR	268	24.513	24.093	82.850	1.00
10	ATOM 5.70	385	N	LYS	269	25.546	24.706	80.928	1.00
	ATOM 7.60	387	CA	LYS	269	25.997	25.980	81.437	1.00
	ATOM 11.19	388	CB	LYS	269	27.008	26.557	80.441	1.00
	ATOM 19.64	389	CG	LYS	269	28.112	27.299	81.092	1.00
20	ATOM 24.28	390	CD	LYS	269	29.454	27.141	80.346	1.00
	ATOM 28.05	391	CE	LYS	269	30.292	28.414	80.570	1.00
	ATOM 29.11	392	NZ	LYS	269	31.712	28.462	80.031	1.00
	ATOM 6.80	396	C	LYS	269	24.835	26.970	81.591	1.00
25	ATOM 4.51	397	O	LYS	269	24.107	27.215	80.617	1.00
	ATOM 4.20	398	N	VAL	270	24.729	27.609	82.759	1.00
	ATOM 5.51	400	CA	VAL	270	23.665	28.550	83.073	1.00
	ATOM 5.12	401	CB	VAL	270	22.487	27.835	83.862	1.00
35	ATOM 5.11	402	CG1	VAL	270	21.848	26.691	83.028	1.00
	ATOM 4.28	403	CG2	VAL	270	23.005	27.227	85.215	1.00
	ATOM 4.46	404	C	VAL	270	24.196	29.670	83.985	1.00
	ATOM 5.70	405	O	VAL	270	25.323	29.602	84.495	1.00
40	ATOM 4.49	406	N	ALA	271	23.427	30.735	84.117	1.00
	ATOM 5.32	408	CA	ALA	271	23.749	31.844	85.016	1.00
	ATOM 5.88	409	CB	ALA	271	23.510	33.201	84.315	1.00
	ATOM 6.25	410	C	ALA	271	22.807	31.730	86.169	1.00
50	ATOM 6.40	411	O	ALA	271	21.619	31.496	85.963	1.00
	ATOM 7.01	412	N	VAL	272	23.311	31.871	87.376	1.00
	ATOM 8.53	414	CA	VAL	272	22.501	31.778	88.577	1.00
	ATOM 10.04	415	CB	VAL	272	22.991	30.643	89.516	1.00
55	ATOM 8.99	416	CG1	VAL	272	22.089	30.562	90.776	1.00

	ATOM	417	CG2	VAL	272	22.962	29.341	88.754	1.00
	9.42								
	ATOM	418	C	VAL	272	22.551	33.066	89.373	1.00
	8.99								
5	ATOM	419	O	VAL	272	23.604	33.496	89.799	1.00
	9.70								
	ATOM	420	N	LYS	273	21.397	33.713	89.473	1.00
	10.49								
10	ATOM	422	CA	LYS	273	21.250	34.941	90.240	1.00
	12.00								
	ATOM	423	CB	LYS	273	20.196	35.824	89.540	1.00
	14.81								
	ATOM	424	CG	LYS	273	20.151	37.282	90.025	1.00
	20.98								
15	ATOM	425	CD	LYS	273	19.145	38.096	89.197	1.00
	21.51								
	ATOM	426	CE	LYS	273	19.180	39.574	89.551	1.00
	25.70								
	ATOM	427	NZ	LYS	273	18.104	40.361	88.885	1.00
20	26.23								
	ATOM	431	C	LYS	273	20.778	34.571	91.660	1.00
	12.95								
	ATOM	432	O	LYS	273	19.717	33.951	91.823	1.00
	10.71								
25	ATOM	433	N	SER	274	21.572	34.907	92.662	1.00
	11.60								
	ATOM	435	CA	SER	274	21.239	34.619	94.053	1.00
	14.29								
30	ATOM	436	CB	SER	274	22.491	34.100	94.762	1.00
	15.73								
	ATOM	437	OG	SER	274	23.481	35.139	94.783	1.00
	18.57								
	ATOM	439	C	SER	274	20.792	35.880	94.777	1.00
	16.33								
35	ATOM	440	O	SER	274	21.347	36.931	94.557	1.00
	16.75								
	ATOM	441	N	LEU	275	19.812	35.772	95.658	1.00
	17.75								
40	ATOM	443	CA	LEU	275	19.364	36.926	96.416	1.00
	19.66								
	ATOM	444	CB	LEU	275	17.874	36.790	96.750	1.00
	17.82								
	ATOM	445	CG	LEU	275	17.242	37.763	97.782	1.00
	18.34								
45	ATOM	446	CD1	LEU	275	17.364	39.217	97.340	1.00
	16.13								
	ATOM	447	CD2	LEU	275	15.773	37.399	97.936	1.00
	19.31								
50	ATOM	448	C	LEU	275	20.136	37.100	97.708	1.00
	20.05								
	ATOM	449	O	LEU	275	20.235	36.168	98.520	1.00
	21.68								
	ATOM	450	N	LYS	276	20.678	38.291	97.915	1.00
	21.85								
55	ATOM	452	CA	LYS	276	21.344	38.566	99.161	1.00
	22.31								
	ATOM	453	CB	LYS	276	22.108	39.880	99.083	1.00
	22.82								

5	ATOM 23.68	454	CG	LYS	276	22.633	40.254	100.446	1.00
	ATOM 23.56	455	CD	LYS	276	23.468	41.476	100.398	1.00
	ATOM 26.66	456	CE	LYS	276	24.054	41.658	101.760	1.00
	ATOM 28.24	457	NZ	LYS	276	25.196	42.568	101.684	1.00
10	ATOM 23.91	461	C	LYS	276	20.266	38.685	100.241	1.00
	ATOM 22.65	462	O	LYS	276	19.513	39.656	100.269	1.00
	ATOM 25.44	463	N	ALA	277	20.162	37.673	101.091	1.00
15	ATOM 28.36	465	CA	ALA	277	19.147	37.644	102.135	1.00
	ATOM 27.71	466	CB	ALA	277	19.387	36.469	103.085	1.00
	ATOM 28.32	467	C	ALA	277	19.046	38.925	102.913	1.00
20	ATOM 31.33	468	O	ALA	277	20.033	39.430	103.427	1.00
	ATOM 29.93	469	N	GLY	278	17.857	39.515	102.899	1.00
	ATOM 29.72	471	CA	GLY	278	17.618	40.743	103.638	1.00
25	ATOM 30.31	472	C	GLY	278	17.743	42.014	102.841	1.00
	ATOM 31.97	473	O	GLY	278	17.208	43.047	103.231	1.00
	ATOM 29.29	474	N	SER	279	18.424	41.945	101.705	1.00
30	ATOM 27.22	476	CA	SER	279	18.618	43.119	100.863	1.00
	ATOM 27.32	477	CB	SER	279	19.657	42.833	99.784	1.00
	ATOM 27.64	478	OG	SER	279	19.144	41.896	98.846	1.00
35	ATOM 26.04	480	C	SER	279	17.359	43.602	100.183	1.00
	ATOM 26.50	481	O	SER	279	17.230	44.747	99.832	1.00
	ATOM 24.08	482	N	MET	280	16.492	42.668	99.844	1.00
40	ATOM 20.84	484	CA	MET	280	15.241	43.003	99.200	1.00
	ATOM 22.08	485	CB	MET	280	15.440	43.303	97.712	1.00
	ATOM 18.69	486	CG	MET	280	15.974	42.167	96.890	1.00
45	ATOM 22.52	487	SD	MET	280	15.987	42.519	95.137	1.00
	ATOM 10.03	488	CE	MET	280	14.275	42.290	94.709	1.00
	ATOM 19.05	489	C	MET	280	14.289	41.854	99.400	1.00
50	ATOM 18.43	490	O	MET	280	14.700	40.750	99.704	1.00

5	ATOM 15.80	491	N	SER	281	13.009	42.108	99.301	1.00
	ATOM 15.96	493	CA	SER	281	12.032	41.073	99.498	1.00
	ATOM 17.20	494	CB	SER	281	10.645	41.676	99.366	1.00
	ATOM 16.98	495	OG	SER	281	9.725	40.685	98.991	1.00
10	ATOM 14.42	497	C	SER	281	12.156	39.928	98.493	1.00
	ATOM 15.13	498	O	SER	281	12.369	40.178	97.303	1.00
	ATOM 11.99	499	N	PRO	282	12.017	38.677	98.944	0.51
15	ATOM 12.01	500	CD	PRO	282	12.119	38.272	100.351	0.51
	ATOM 9.71	501	CA	PRO	282	12.092	37.516	98.056	0.51
	ATOM 9.45	502	CB	PRO	282	11.942	36.318	99.009	0.51
20	ATOM 11.53	503	CG	PRO	282	11.505	36.907	100.327	0.51
	ATOM 8.44	504	C	PRO	282	10.971	37.570	97.000	0.51
	ATOM 3.52	505	O	PRO	282	11.137	37.132	95.864	0.51
25	ATOM 9.84	506	N	ASP	283	9.801	38.069	97.408	1.00
	ATOM 10.75	508	CA	ASP	283	8.689	38.252	96.484	1.00
	ATOM 15.31	509	CB	ASP	283	7.478	38.857	97.209	1.00
30	ATOM 18.52	510	CG	ASP	283	6.276	39.016	96.301	1.00
	ATOM 18.82	511	OD1	ASP	283	5.791	37.972	95.818	1.00
	ATOM 19.91	512	OD2	ASP	283	5.809	40.169	96.061	1.00
35	ATOM 10.82	513	C	ASP	283	9.100	39.211	95.391	1.00
	ATOM 10.24	514	O	ASP	283	8.812	38.997	94.250	1.00
	ATOM 9.15	515	N	ALA	284	9.787	40.295	95.769	1.00
40	ATOM 12.47	517	CA	ALA	284	10.252	41.282	94.770	1.00
	ATOM 11.84	518	CB	ALA	284	10.921	42.462	95.466	1.00
	ATOM 12.12	519	C	ALA	284	11.250	40.642	93.803	1.00
45	ATOM 12.27	520	O	ALA	284	11.134	40.745	92.569	1.00
	ATOM 13.53	521	N	PHE	285	12.176	39.881	94.384	1.00
	ATOM 12.88	523	CA	PHE	285	13.198	39.163	93.620	1.00
55	ATOM 10.02	524	CB	PHE	285	14.092	38.404	94.615	1.00

	ATOM 9.97	525	CG	PHE	285	15.241	37.657	93.979	1.00
	ATOM 11.33	526	CD1	PHE	285	16.388	38.312	93.585	1.00
5	ATOM 10.09	527	CD2	PHE	285	15.171	36.266	93.824	1.00
	ATOM 12.01	528	CE1	PHE	285	17.468	37.590	93.037	1.00
10	ATOM 8.91	529	CE2	PHE	285	16.222	35.561	93.297	1.00
	ATOM 9.02	530	CZ	PHE	285	17.366	36.215	92.905	1.00
	ATOM 13.34	531	C	PHE	285	12.551	38.230	92.597	1.00
15	ATOM 14.06	532	O	PHE	285	12.767	38.355	91.376	1.00
	ATOM 13.73	533	N	LEU	286	11.645	37.378	93.082	1.00
20	ATOM 13.26	535	CA	LEU	286	10.950	36.406	92.251	1.00
	ATOM 13.89	536	CB	LEU	286	10.195	35.405	93.118	1.00
	ATOM 14.02	537	CG	LEU	286	11.161	34.471	93.851	1.00
25	ATOM 15.09	538	CD1	LEU	286	10.336	33.449	94.581	1.00
	ATOM 14.06	539	CD2	LEU	286	12.141	33.772	92.882	1.00
30	ATOM 14.59	540	C	LEU	286	10.013	36.957	91.164	1.00
	ATOM 12.36	541	O	LEU	286	9.770	36.292	90.126	1.00
	ATOM 12.82	542	N	ALA	287	9.545	38.181	91.372	1.00
35	ATOM 14.03	544	CA	ALA	287	8.674	38.823	90.398	1.00
	ATOM 12.35	545	CB	ALA	287	8.299	40.253	90.886	1.00
40	ATOM 12.11	546	C	ALA	287	9.309	38.885	89.011	1.00
	ATOM 14.16	547	O	ALA	287	8.624	38.732	88.000	1.00
	ATOM 13.07	548	N	GLU	288	10.616	39.149	88.967	1.00
45	ATOM 13.61	550	CA	GLU	288	11.337	39.210	87.702	1.00
	ATOM 17.54	551	CB	GLU	288	12.823	39.550	87.924	1.00
50	ATOM 20.67	552	CG	GLU	288	13.514	40.087	86.624	1.00
	ATOM 22.80	553	CD	GLU	288	15.010	39.853	86.585	1.00
	ATOM 26.25	554	OE1	GLU	288	15.609	39.713	87.685	1.00
55	ATOM 23.11	555	OE2	GLU	288	15.592	39.825	85.452	1.00
	ATOM 14.04	556	C	GLU	288	11.243	37.890	86.941	1.00

	ATOM 11.37	557	O	GLU	288	11.074	37.858	85.713	1.00
	ATOM 13.32	558	N	ALA	289	11.356	36.776	87.677	1.00
5	ATOM 12.33	560	CA	ALA	289	11.255	35.459	87.014	1.00
	ATOM 9.97	561	CB	ALA	289	11.609	34.340	87.987	1.00
10	ATOM 11.60	562	C	ALA	289	9.850	35.258	86.462	1.00
	ATOM 11.52	563	O	ALA	289	9.653	34.800	85.348	1.00
	ATOM 13.27	564	N	ASN	290	8.839	35.611	87.257	1.00
15	ATOM 12.41	566	CA	ASN	290	7.457	35.477	86.807	1.00
	ATOM 14.49	567	CB	ASN	290	6.502	35.901	87.931	1.00
20	ATOM 20.55	568	CG	ASN	290	6.524	34.917	89.099	1.00
	ATOM 22.92	569	OD1	ASN	290	6.929	33.755	88.937	1.00
	ATOM 22.93	570	ND2	ASN	290	6.105	35.377	90.279	1.00
25	ATOM 12.76	573	C	ASN	290	7.213	36.292	85.530	1.00
	ATOM 11.17	574	O	ASN	290	6.540	35.854	84.595	1.00
30	ATOM 11.61	575	N	LEU	291	7.795	37.485	85.456	1.00
	ATOM 11.64	577	CA	LEU	291	7.626	38.259	84.224	1.00
	ATOM 9.96	578	CB	LEU	291	8.169	39.673	84.422	1.00
35	ATOM 11.85	579	CG	LEU	291	8.160	40.645	83.255	1.00
	ATOM 13.57	580	CD1	LEU	291	7.872	42.090	83.793	1.00
40	ATOM 14.59	581	CD2	LEU	291	9.451	40.583	82.529	1.00
	ATOM 11.11	582	C	LEU	291	8.346	37.596	83.032	1.00
	ATOM 8.95	583	O	LEU	291	7.835	37.568	81.936	1.00
45	ATOM 10.78	584	N	MET	292	9.556	37.084	83.258	1.00
	ATOM 11.56	586	CA	MET	292	10.318	36.453	82.163	1.00
50	ATOM 10.22	587	CB	MET	292	11.703	36.016	82.636	1.00
	ATOM 10.81	588	CG	MET	292	12.600	37.176	83.098	1.00
	ATOM 12.07	589	SD	MET	292	14.110	36.571	83.937	1.00
55	ATOM 9.73	590	CE	MET	292	15.113	36.169	82.522	1.00
	ATOM 13.99	591	C	MET	292	9.576	35.269	81.533	1.00

5	ATOM 13.51	592	O	MET	292	9.781	34.955	80.375	1.00
	ATOM 14.27	593	N	LYS	293	8.747	34.600	82.326	1.00
	ATOM 18.20	595	CA	LYS	293	7.927	33.505	81.810	1.00
	ATOM 17.91	596	CB	LYS	293	7.059	32.889	82.918	1.00
	ATOM 19.57	597	CG	LYS	293	7.788	32.069	83.956	1.00
10	ATOM 22.28	598	CD	LYS	293	6.832	31.655	85.125	1.00
	ATOM 24.15	599	CE	LYS	293	7.630	31.258	86.369	1.00
	ATOM 26.53	600	NZ	LYS	293	6.765	30.817	87.547	1.00
15	ATOM 17.56	604	C	LYS	293	7.027	33.985	80.642	1.00
	ATOM 19.70	605	O	LYS	293	6.825	33.260	79.667	1.00
	ATOM 18.40	606	N	GLN	294	6.569	35.232	80.725	1.00
	ATOM 18.61	608	CA	GLN	294	5.715	35.871	79.692	1.00
	ATOM 18.33	609	CB	GLN	294	4.932	37.056	80.299	1.00
20	ATOM 18.95	610	CG	GLN	294	4.157	36.753	81.587	1.00
	ATOM 21.42	611	CD	GLN	294	3.299	35.548	81.445	1.00
	ATOM 25.23	612	OE1	GLN	294	2.661	35.330	80.392	1.00
25	ATOM 23.40	613	NE2	GLN	294	3.288	34.712	82.470	1.00
	ATOM 18.97	616	C	GLN	294	6.479	36.459	78.519	1.00
	ATOM 20.23	617	O	GLN	294	5.883	37.021	77.573	1.00
	ATOM 17.18	618	N	LEU	295	7.799	36.476	78.608	1.00
	ATOM 15.88	620	CA	LEU	295	8.571	37.061	77.539	1.00
30	ATOM 16.19	621	CB	LEU	295	9.206	38.391	77.978	1.00
	ATOM 14.51	622	CG	LEU	295	8.265	39.561	78.250	1.00
	ATOM 14.42	623	CD1	LEU	295	9.034	40.678	78.953	1.00
35	ATOM 14.80	624	CD2	LEU	295	7.672	40.025	76.914	1.00
	ATOM 15.46	625	C	LEU	295	9.634	36.148	77.051	1.00
	ATOM 16.92	626	O	LEU	295	10.808	36.414	77.229	1.00
40	ATOM 13.87	627	N	GLN	296	9.217	35.076	76.402	1.00
	ATOM 12.14	629	CA	GLN	296	10.166	34.124	75.882	1.00

	ATOM 12.02	630	CB	GLN	296	9.622	32.698	76.060	1.00
	ATOM 13.14	631	CG	GLN	296	9.503	32.296	77.521	1.00
5	ATOM 13.95	632	CD	GLN	296	8.863	30.942	77.698	1.00
	ATOM 14.90	633	OE1	GLN	296	9.306	29.989	77.113	1.00
10	ATOM 11.25	634	NE2	GLN	296	7.815	30.863	78.526	1.00
	ATOM 11.43	637	C	GLN	296	10.377	34.436	74.422	1.00
	ATOM 10.56	638	O	GLN	296	9.420	34.517	73.667	1.00
15	ATOM 8.16	639	N	HIS	297	11.615	34.700	74.047	1.00
	ATOM 7.06	641	CA	HIS	297	11.925	35.031	72.665	1.00
20	ATOM 8.21	642	CB	HIS	297	11.524	36.520	72.425	1.00
	ATOM 7.91	643	CG	HIS	297	11.682	36.972	71.002	1.00
	ATOM 9.84	644	CD2	HIS	297	10.810	37.047	69.993	1.00
25	ATOM 7.23	645	ND1	HIS	297	12.919	37.329	70.475	1.00
	ATOM 7.62	647	CE1	HIS	297	12.776	37.594	69.201	1.00
30	ATOM 8.05	648	NE2	HIS	297	11.501	37.428	68.858	1.00
	ATOM 5.69	650	C	HIS	297	13.408	34.835	72.494	1.00
	ATOM 6.84	651	O	HIS	297	14.156	35.019	73.484	1.00
35	ATOM 5.85	652	N	GLN	298	13.888	34.501	71.297	1.00
	ATOM 5.85	654	CA	GLN	298	15.348	34.304	71.124	1.00
40	ATOM 7.17	655	CB	GLN	298	15.751	33.937	69.688	1.00
	ATOM 7.62	656	CG	GLN	298	15.283	32.622	69.181	1.00
	ATOM 5.57	657	CD	GLN	298	15.876	31.431	69.900	1.00
45	ATOM 6.33	658	OE1	GLN	298	15.131	30.570	70.307	1.00
	ATOM 3.89	659	NE2	GLN	298	17.232	31.341	69.984	1.00
50	ATOM 6.17	662	C	GLN	298	16.203	35.502	71.486	1.00
	ATOM 4.21	663	O	GLN	298	17.357	35.340	71.902	1.00
	ATOM 5.30	664	N	ARG	299	15.660	36.706	71.294	1.00
55	ATOM 5.58	666	CA	ARG	299	16.427	37.934	71.588	1.00
	ATOM 5.47	667	CB	ARG	299	16.016	39.064	70.642	1.00



5	ATOM 5.45	668	CG	ARG	299	16.154	38.726	69.148	1.00
	ATOM 6.21	669	CD	ARG	299	17.567	39.101	68.588	1.00
	ATOM 4.29	670	NE	ARG	299	18.692	38.485	69.320	1.00
	ATOM 6.38	672	CZ	ARG	299	19.049	37.196	69.256	1.00
	ATOM 2.92	673	NH1	ARG	299	18.364	36.337	68.501	1.00
10	ATOM 2.41	676	NH2	ARG	299	20.162	36.791	69.863	1.00
	ATOM 4.17	679	C	ARG	299	16.369	38.420	73.047	1.00
	ATOM 2.82	680	O	ARG	299	16.849	39.506	73.342	1.00
15	ATOM 2.95	681	N	LEU	300	15.673	37.680	73.918	1.00
	ATOM 5.10	683	CA	LEU	300	15.595	37.956	75.366	1.00
	ATOM 6.30	684	CB	LEU	300	14.140	38.104	75.859	1.00
20	ATOM 6.48	685	CG	LEU	300	13.449	39.474	75.631	1.00
	ATOM 5.11	686	CD1	LEU	300	13.525	39.871	74.166	1.00
	ATOM 5.95	687	CD2	LEU	300	11.972	39.426	76.097	1.00
30	ATOM 5.43	688	C	LEU	300	16.261	36.823	76.189	1.00
	ATOM 8.06	689	O	LEU	300	16.035	35.652	75.890	1.00
	ATOM 3.26	690	N	VAL	301	17.114	37.172	77.153	1.00
35	ATOM 4.14	692	CA	VAL	301	17.729	36.170	78.009	1.00
	ATOM 5.85	693	CB	VAL	301	18.612	36.847	79.115	1.00
	ATOM 6.95	694	CG1	VAL	301	18.976	35.830	80.239	1.00
40	ATOM 4.28	695	CG2	VAL	301	19.908	37.376	78.452	1.00
	ATOM 4.74	696	C	VAL	301	16.589	35.341	78.595	1.00
	ATOM 3.76	697	O	VAL	301	15.607	35.898	79.118	1.00
45	ATOM 5.01	698	N	ARG	302	16.655	34.034	78.353	1.00
	ATOM 6.78	700	CA	ARG	302	15.582	33.093	78.747	1.00
	ATOM 4.29	701	CB	ARG	302	15.586	31.885	77.760	1.00
50	ATOM 5.87	702	CG	ARG	302	14.425	30.854	77.977	1.00
	ATOM 10.00	703	CD	ARG	302	14.589	29.621	77.023	1.00
	ATOM 10.74	704	NE	ARG	302	13.653	28.529	77.330	1.00

	ATOM 13.16	706	CZ	ARG	302	13.839	27.642	78.306	1.00
	ATOM 10.13	707	NH1	ARG	302	14.931	27.696	79.064	1.00
5	ATOM 14.10	710	NH2	ARG	302	12.917	26.721	78.546	1.00
	ATOM 4.90	713	C	ARG	302	15.638	32.574	80.157	1.00
10	ATOM 4.69	714	O	ARG	302	16.711	32.175	80.623	1.00
	ATOM 3.59	715	N	LEU	303	14.497	32.607	80.849	1.00
	ATOM 5.79	717	CA	LEU	303	14.419	32.026	82.175	1.00
15	ATOM 4.46	718	CB	LEU	303	13.045	32.312	82.820	1.00
	ATOM 6.09	719	CG	LEU	303	12.798	31.556	84.147	1.00
20	ATOM 5.83	720	CD1	LEU	303	13.683	32.133	85.182	1.00
	ATOM 5.76	721	CD2	LEU	303	11.298	31.702	84.590	1.00
	ATOM 6.12	722	C	LEU	303	14.597	30.495	82.033	1.00
25	ATOM 5.68	723	O	LEU	303	14.016	29.880	81.137	1.00
	ATOM 6.67	724	N	TYR	304	15.467	29.939	82.854	1.00
30	ATOM 10.36	726	CA	TYR	304	15.760	28.519	82.853	1.00
	ATOM 12.58	727	CB	TYR	304	17.291	28.358	83.016	1.00
	ATOM 18.48	728	CG	TYR	304	17.822	26.995	82.695	1.00
35	ATOM 18.80	729	CD1	TYR	304	17.631	25.921	83.579	1.00
	ATOM 20.58	730	CE1	TYR	304	18.052	24.647	83.257	1.00
40	ATOM 19.27	731	CD2	TYR	304	18.451	26.747	81.479	1.00
	ATOM 18.54	732	CE2	TYR	304	18.876	25.452	81.134	1.00
	ATOM 20.02	733	CZ	TYR	304	18.670	24.416	82.021	1.00
45	ATOM 20.08	734	OH	TYR	304	19.095	23.141	81.707	1.00
	ATOM 9.73	736	C	TYR	304	15.001	27.749	83.976	1.00
50	ATOM 10.05	737	O	TYR	304	14.413	26.700	83.742	1.00
	ATOM 7.52	738	N	ALA	305	15.004	28.302	85.185	1.00
	ATOM 9.06	740	CA	ALA	305	14.384	27.634	86.321	1.00
55	ATOM 9.73	741	CB	ALA	305	15.183	26.340	86.675	1.00
	ATOM 7.93	742	C	ALA	305	14.446	28.551	87.520	1.00

	ATOM	743	O	ALA	305	15.064	29.608	87.437	1.00
	5.51								
	ATOM	744	N	VAL	306	13.812	28.133	88.606	0.75
	5.06								
5	ATOM	746	CA	VAL	306	13.843	28.850	89.869	0.75
	5.16								
	ATOM	747	CB	VAL	306	12.577	29.752	90.092	0.75
	5.18								
10	ATOM	748	CG1	VAL	306	12.496	30.839	89.018	0.75
	4.67								
	ATOM	749	CG2	VAL	306	11.296	28.899	90.096	0.75
	8.77								
	ATOM	750	C	VAL	306	13.890	27.878	91.033	0.75
	7.22								
15	ATOM	751	O	VAL	306	13.539	26.688	90.902	0.75
	5.43								
	ATOM	752	N	VAL	307	14.463	28.359	92.125	1.00
	10.68								
20	ATOM	754	CA	VAL	307	14.508	27.659	93.397	1.00
	12.59								
	ATOM	755	CB	VAL	307	15.958	27.351	93.812	1.00
	13.79								
	ATOM	756	CG1	VAL	307	16.007	26.697	95.200	1.00
	13.71								
25	ATOM	757	CG2	VAL	307	16.608	26.402	92.743	1.00
	14.06								
	ATOM	758	C	VAL	307	13.868	28.676	94.353	1.00
	13.65								
30	ATOM	759	O	VAL	307	14.442	29.722	94.622	1.00
	13.40								
	ATOM	760	N	THR	308	12.636	28.409	94.744	1.00
	14.36								
	ATOM	762	CA	THR	308	11.868	29.320	95.583	1.00
	17.04								
35	ATOM	763	CB	THR	308	10.423	29.408	95.087	1.00
	17.52								
	ATOM	764	OG1	THR	308	9.839	28.089	95.072	1.00
	17.06								
40	ATOM	766	CG2	THR	308	10.407	29.988	93.650	1.00
	14.81								
	ATOM	767	C	THR	308	11.915	29.139	97.116	1.00
	20.73								
	ATOM	768	O	THR	308	11.151	29.785	97.843	1.00
	20.55								
45	ATOM	769	N	ALA	309	12.808	28.273	97.576	1.00
	23.05								
	ATOM	771	CA	ALA	309	13.075	28.034	98.990	1.00
	26.63								
50	ATOM	772	CB	ALA	309	13.186	26.514	99.259	1.00
	27.10								
	ATOM	773	C	ALA	309	14.400	28.710	99.259	1.00
	27.06								
	ATOM	774	O	ALA	309	15.294	28.651	98.421	1.00
	28.53								
55	ATOM	775	N	GLU	310	14.528	29.426	100.372	1.00
	29.16								
	ATOM	777	CA	GLU	310	15.768	30.145	100.684	1.00
	29.78								

5	ATOM 32.43	778	CB	GLU	310	15.524	31.083	101.885	1.00
	ATOM 37.17	779	CG	GLU	310	14.395	32.120	101.619	1.00
	ATOM 40.15	780	CD	GLU	310	14.264	33.233	102.677	1.00
	ATOM 41.14	781	OE1	GLU	310	15.052	33.274	103.659	1.00
10	ATOM 41.13	782	OE2	GLU	310	13.356	34.084	102.516	1.00
	ATOM 30.28	783	C	GLU	310	16.979	29.220	100.920	1.00
	ATOM 30.28	784	O	GLU	310	16.810	28.135	101.475	1.00
	ATOM 27.46	785	N	PRO	311	18.184	29.589	100.401	1.00
15	ATOM 27.79	786	CD	PRO	311	19.431	28.823	100.539	1.00
	ATOM 26.53	787	CA	PRO	311	18.399	30.791	99.598	1.00
	ATOM 28.19	788	CB	PRO	311	19.921	30.941	99.589	1.00
	ATOM 28.21	789	CG	PRO	311	20.403	29.570	99.615	1.00
20	ATOM 25.22	790	C	PRO	311	17.793	30.569	98.210	1.00
	ATOM 25.62	791	O	PRO	311	17.759	29.443	97.689	1.00
	ATOM 20.59	792	N	ILE	312	17.237	31.642	97.668	1.00
	ATOM 18.53	794	CA	ILE	312	16.521	31.626	96.409	1.00
25	ATOM 20.69	795	CB	ILE	312	15.394	32.689	96.474	1.00
	ATOM 23.02	796	CG2	ILE	312	14.560	32.665	95.198	1.00
	ATOM 23.23	797	CG1	ILE	312	14.486	32.398	97.690	1.00
	ATOM 25.11	798	CD1	ILE	312	13.437	33.459	97.930	1.00
30	ATOM 15.57	799	C	ILE	312	17.387	31.914	95.222	1.00
	ATOM 13.64	800	O	ILE	312	18.319	32.702	95.295	1.00
	ATOM 11.22	801	N	TYR	313	17.039	31.313	94.092	1.00
	ATOM 10.98	803	CA	TYR	313	17.780	31.540	92.849	1.00
35	ATOM 13.10	804	CB	TYR	313	18.696	30.350	92.514	1.00
	ATOM 16.88	805	CG	TYR	313	19.723	29.965	93.549	1.00
	ATOM 18.93	806	CD1	TYR	313	20.558	30.910	94.130	1.00
	ATOM 20.18	807	CE1	TYR	313	21.559	30.535	95.042	1.00
40	ATOM 19.50	808	CD2	TYR	313	19.901	28.643	93.896	1.00

	ATOM	809	CE2	TYR	313	20.874	28.260	94.810	1.00
	23.04								
	ATOM	810	CZ	TYR	313	21.700	29.198	95.382	1.00
	22.50								
5	ATOM	811	OH	TYR	313	22.615	28.780	96.334	1.00
	23.90								
	ATOM	813	C	TYR	313	16.847	31.681	91.660	1.00
	7.53								
10	ATOM	814	O	TYR	313	15.759	31.147	91.663	1.00
	7.59								
	ATOM	815	N	ILE	314	17.274	32.485	90.708	0.82
	5.19								
	ATOM	817	CA	ILE	314	16.629	32.619	89.430	0.82
	4.86								
15	ATOM	818	CB	ILE	314	16.262	34.121	89.045	0.82
	4.18								
	ATOM	819	CG2	ILE	314	15.868	34.202	87.538	0.82
	4.60								
20	ATOM	820	CG1	ILE	314	15.121	34.628	89.927	0.82
	4.86								
	ATOM	821	CD1	ILE	314	14.733	36.090	89.720	0.82
	5.03								
	ATOM	822	C	ILE	314	17.709	32.110	88.468	0.82
	3.70								
25	ATOM	823	O	ILE	314	18.834	32.649	88.420	0.82
	4.66								
	ATOM	824	N	ILE	315	17.421	31.047	87.742	1.00
	3.50								
30	ATOM	826	CA	ILE	315	18.429	30.500	86.833	1.00
	4.82								
	ATOM	827	CB	ILE	315	18.532	28.945	86.945	1.00
	6.00								
	ATOM	828	CG2	ILE	315	19.664	28.420	86.046	1.00
	2.00								
35	ATOM	829	CG1	ILE	315	18.799	28.533	88.401	1.00
	7.08								
	ATOM	830	CD1	ILE	315	17.513	28.158	89.123	1.00
	9.51								
40	ATOM	831	C	ILE	315	18.094	30.888	85.408	1.00
	4.20								
	ATOM	832	O	ILE	315	16.958	30.735	84.988	1.00
	3.76								
	ATOM	833	N	THR	316	19.069	31.406	84.672	1.00
	3.78								
45	ATOM	835	CA	THR	316	18.801	31.849	83.327	1.00
	6.81								
	ATOM	836	CB	THR	316	18.795	33.443	83.208	1.00
	10.74								
50	ATOM	837	OG1	THR	316	20.135	33.944	83.317	1.00
	8.08								
	ATOM	839	CG2	THR	316	17.941	34.094	84.309	1.00
	7.54								
	ATOM	840	C	THR	316	19.836	31.360	82.341	1.00
	8.02								
55	ATOM	841	O	THR	316	20.829	30.707	82.705	1.00
	7.95								
	ATOM	842	N	GLU	317	19.546	31.668	81.073	1.00
	8.12								

5	ATOM 6.24	844	CA	GLU	317	20.406	31.390	79.925	1.00
	ATOM 6.14	845	CB	GLU	317	19.697	32.000	78.689	1.00
	ATOM 5.27	846	CG	GLU	317	20.403	31.836	77.334	1.00
	ATOM 6.54	847	CD	GLU	317	19.526	32.312	76.153	1.00
10	ATOM 8.58	848	OE1	GLU	317	18.590	33.110	76.366	1.00
	ATOM 6.88	849	OE2	GLU	317	19.786	31.895	74.992	1.00
	ATOM 6.62	850	C	GLU	317	21.746	32.105	80.164	1.00
15	ATOM 5.80	851	O	GLU	317	21.770	33.266	80.625	1.00
	ATOM 4.84	852	N	TYR	318	22.845	31.425	79.833	1.00
20	ATOM 20.00	853	H	TYR	318	22.781	30.554	79.430	1.00
	ATOM 7.09	854	CA	TYR	318	24.194	31.946	79.996	1.00
	ATOM 6.94	855	CB	TYR	318	25.127	30.784	80.307	1.00
25	ATOM 8.70	856	CG	TYR	318	26.586	31.175	80.412	1.00
	ATOM 8.78	857	CD1	TYR	318	27.507	30.641	79.536	1.00
30	ATOM 12.40	858	CE1	TYR	318	28.838	30.963	79.622	1.00
	ATOM 9.60	859	CD2	TYR	318	27.032	32.056	81.395	1.00
	ATOM 11.60	860	CE2	TYR	318	28.398	32.393	81.499	1.00
35	ATOM 12.34	861	CZ	TYR	318	29.282	31.831	80.592	1.00
	ATOM 13.65	862	OH	TYR	318	30.605	32.172	80.614	1.00
40	ATOM 7.87	864	C	TYR	318	24.679	32.630	78.718	1.00
	ATOM 7.67	865	O	TYR	318	24.588	32.055	77.646	1.00
	ATOM 7.03	866	N	MET	319	25.230	33.826	78.851	1.00
45	ATOM 7.90	868	CA	MET	319	25.733	34.612	77.702	1.00
	ATOM 7.45	869	CB	MET	319	24.936	35.929	77.662	1.00
50	ATOM 8.56	870	CG	MET	319	23.415	35.686	77.475	1.00
	ATOM 11.41	871	SD	MET	319	23.081	34.959	75.864	1.00
	ATOM 5.20	872	CE	MET	319	23.496	36.172	74.813	1.00
55	ATOM 8.08	873	C	MET	319	27.225	34.826	77.917	1.00
	ATOM 6.69	874	O	MET	319	27.678	35.630	78.741	1.00

5	ATOM 7.13	875	N	GLU	320	27.998	34.004	77.225	1.00
	ATOM 10.02	877	CA	GLU	320	29.433	33.933	77.394	1.00
	ATOM 15.75	878	CB	GLU	320	29.989	32.986	76.317	1.00
	ATOM 23.94	879	CG	GLU	320	31.462	32.922	76.271	1.00
	ATOM 29.33	880	CD	GLU	320	31.934	31.545	76.529	1.00
10	ATOM 33.76	881	OE1	GLU	320	32.143	31.198	77.738	1.00
	ATOM 27.05	882	OE2	GLU	320	31.959	30.741	75.562	1.00
	ATOM 10.37	883	C	GLU	320	30.271	35.225	77.440	1.00
20	ATOM 8.73	884	O	GLU	320	31.225	35.342	78.238	1.00
	ATOM 6.58	885	N	ASN	321	29.928	36.181	76.579	1.00
	ATOM 6.63	887	CA	ASN	321	30.664	37.418	76.483	1.00
	ATOM 3.44	888	CB	ASN	321	30.812	37.808	74.991	1.00
	ATOM 7.15	889	CG	ASN	321	31.833	36.914	74.270	1.00
30	ATOM 4.07	890	OD1	ASN	321	32.960	36.707	74.772	1.00
	ATOM 6.04	891	ND2	ASN	321	31.452	36.346	73.151	1.00
	ATOM 6.86	894	C	ASN	321	30.173	38.555	77.364	1.00
	ATOM 7.33	895	O	ASN	321	30.599	39.689	77.211	1.00
	ATOM 5.72	896	N	GLY	322	29.238	38.237	78.269	1.00
40	ATOM 5.81	898	CA	GLY	322	28.783	39.238	79.235	1.00
	ATOM 4.76	899	C	GLY	322	28.136	40.486	78.701	1.00
	ATOM 4.07	900	O	GLY	322	27.537	40.429	77.649	1.00
	ATOM 4.07	901	N	SER	323	28.234	41.597	79.422	1.00
	ATOM 4.52	903	CA	SER	323	27.601	42.830	78.975	1.00
50	ATOM 5.64	904	CB	SER	323	27.551	43.892	80.118	1.00
	ATOM 10.41	905	OG	SER	323	26.697	43.489	81.181	1.00
	ATOM 4.42	907	C	SER	323	28.238	43.441	77.759	1.00
	ATOM 6.97	908	O	SER	323	29.475	43.522	77.636	1.00
	ATOM 2.28	909	N	LEU	324	27.387	43.900	76.853	1.00
55	ATOM 5.27	911	CA	LEU	324	27.840	44.535	75.644	1.00

	ATOM 3.48	912	CB	LEU	324	26.642	45.033	74.833	1.00
	ATOM 5.04	913	CG	LEU	324	26.955	45.780	73.529	1.00
5	ATOM 6.71	914	CD1	LEU	324	27.664	44.823	72.523	1.00
	ATOM 8.47	915	CD2	LEU	324	25.617	46.220	72.922	1.00
10	ATOM 5.66	916	C	LEU	324	28.749	45.740	75.945	1.00
	ATOM 6.05	917	O	LEU	324	29.777	45.913	75.288	1.00
	ATOM 6.08	918	N	VAL	325	28.395	46.537	76.950	1.00
15	ATOM 6.56	920	CA	VAL	325	29.227	47.692	77.284	1.00
	ATOM 6.30	921	CB	VAL	325	28.601	48.567	78.411	1.00
20	ATOM 6.07	922	CG1	VAL	325	28.897	47.976	79.791	1.00
	ATOM 6.51	923	CG2	VAL	325	29.125	49.976	78.262	1.00
	ATOM 8.74	924	C	VAL	325	30.668	47.301	77.634	1.00
25	ATOM 8.55	925	O	VAL	325	31.578	48.063	77.344	1.00
	ATOM 8.86	926	N	ASP	326	30.850	46.118	78.250	1.00
30	ATOM 9.40	928	CA	ASP	326	32.183	45.599	78.576	1.00
	ATOM 10.79	929	CB	ASP	326	32.137	44.627	79.786	1.00
	ATOM 15.23	930	CG	ASP	326	31.682	45.309	81.073	1.00
35	ATOM 17.45	931	OD1	ASP	326	31.907	46.527	81.226	1.00
	ATOM 15.65	932	OD2	ASP	326	31.114	44.620	81.945	1.00
40	ATOM 8.47	933	C	ASP	326	32.814	44.878	77.374	1.00
	ATOM 8.70	934	O	ASP	326	34.010	45.097	77.041	1.00
	ATOM 6.30	935	N	PHE	327	32.041	44.008	76.712	1.00
45	ATOM 5.97	937	CA	PHE	327	32.533	43.275	75.550	1.00
	ATOM 6.18	938	CB	PHE	327	31.417	42.452	74.872	1.00
50	ATOM 5.53	939	CG	PHE	327	31.863	41.778	73.574	1.00
	ATOM 5.80	940	CD1	PHE	327	32.755	40.715	73.600	1.00
	ATOM 7.58	941	CD2	PHE	327	31.399	42.238	72.335	1.00
55	ATOM 3.63	942	CE1	PHE	327	33.197	40.104	72.401	1.00
	ATOM 6.07	943	CE2	PHE	327	31.816	41.666	71.151	1.00



	ATOM 6.92	944	CZ	PHE	327	32.733	40.585	71.193	1.00
	ATOM 6.02	945	C	PHE	327	33.179	44.164	74.441	1.00
5	ATOM 4.71	946	O	PHE	327	34.170	43.765	73.827	1.00
	ATOM 2.63	947	N	LEU	328	32.577	45.326	74.176	0.40
10	ATOM 2.00	949	CA	LEU	328	33.076	46.237	73.130	0.40
	ATOM 2.00	950	CB	LEU	328	32.067	47.361	72.882	0.40
	ATOM 2.00	951	CG	LEU	328	30.693	46.917	72.327	0.40
15	ATOM 2.00	952	CD1	LEU	328	29.763	48.096	72.210	0.40
	ATOM 2.00	953	CD2	LEU	328	30.847	46.243	70.979	0.40
20	ATOM 3.02	954	C	LEU	328	34.476	46.819	73.373	0.40
	ATOM 2.00	955	O	LEU	328	35.072	47.402	72.496	0.40
	ATOM 6.19	956	N	LYS	329	34.916	46.745	74.625	1.00
25	ATOM 8.81	958	CA	LYS	329	36.245	47.196	75.057	1.00
	ATOM 9.48	959	CB	LYS	329	36.190	47.773	76.477	1.00
30	ATOM 10.04	960	CG	LYS	329	35.251	48.970	76.589	1.00
	ATOM 9.54	961	CD	LYS	329	35.080	49.401	78.016	1.00
	ATOM 11.11	962	CE	LYS	329	33.808	50.288	78.100	1.00
35	ATOM 13.64	963	NZ	LYS	329	33.664	50.767	79.489	1.00
	ATOM 7.62	967	C	LYS	329	37.304	46.104	75.026	1.00
40	ATOM 6.19	968	O	LYS	329	38.486	46.372	75.245	1.00
	ATOM 7.54	969	N	THR	330	36.882	44.853	74.859	1.00
	ATOM 8.64	971	CA	THR	330	37.876	43.765	74.792	1.00
45	ATOM 6.18	972	CB	THR	330	37.204	42.387	75.026	1.00
	ATOM 8.72	973	OG1	THR	330	36.302	42.117	73.957	1.00
50	ATOM 9.44	975	CG2	THR	330	36.437	42.396	76.362	1.00
	ATOM 8.40	976	C	THR	330	38.543	43.742	73.440	1.00
	ATOM 9.09	977	O	THR	330	38.049	44.349	72.499	1.00
55	ATOM 10.04	978	N	PRO	331	39.628	42.958	73.281	1.00
	ATOM 8.53	979	CD	PRO	331	40.423	42.266	74.324	1.00

	ATOM	980	CA	PRO	331	40.318	42.890	71.989	1.00
	10.41								
	ATOM	981	CB	PRO	331	41.418	41.849	72.247	1.00
	8.90								
5	ATOM	982	CG	PRO	331	41.784	42.165	73.621	1.00
	10.95								
	ATOM	983	C	PRO	331	39.375	42.460	70.878	1.00
	10.90								
10	ATOM	984	O	PRO	331	39.397	43.019	69.779	1.00
	11.98								
	ATOM	985	N	SER	332	38.515	41.491	71.162	1.00
	9.20								
	ATOM	987	CA	SER	332	37.549	41.082	70.145	1.00
	12.25								
15	ATOM	988	CB	SER	332	36.719	39.902	70.646	1.00
	10.86								
	ATOM	989	OG	SER	332	37.530	38.761	70.767	1.00
	18.10								
20	ATOM	991	C	SER	332	36.570	42.207	69.803	1.00
	11.43								
	ATOM	992	O	SER	332	36.299	42.481	68.646	1.00
	12.17								
	ATOM	993	N	GLY	333	36.022	42.826	70.837	1.00
	9.65								
25	ATOM	995	CA	GLY	333	35.047	43.887	70.619	1.00
	11.87								
	ATOM	996	C	GLY	333	35.583	45.068	69.838	1.00
	10.52								
30	ATOM	997	O	GLY	333	34.919	45.600	68.942	1.00
	9.33								
	ATOM	998	N	ILE	334	36.809	45.476	70.175	1.00
	11.53								
	ATOM	1000	CA	ILE	334	37.456	46.609	69.508	1.00
	12.33								
35	ATOM	1001	CB	ILE	334	38.857	46.896	70.146	1.00
	15.13								
	ATOM	1002	CG2	ILE	334	39.623	47.990	69.348	1.00
	16.44								
40	ATOM	1003	CG1	ILE	334	38.689	47.316	71.603	1.00
	13.62								
	ATOM	1004	CD1	ILE	334	40.003	47.491	72.392	1.00
	16.24								
	ATOM	1005	C	ILE	334	37.581	46.407	68.010	1.00
	13.92								
45	ATOM	1006	O	ILE	334	37.397	47.319	67.228	1.00
	17.25								
	ATOM	1007	N	LYS	335	37.860	45.181	67.609	1.00
	14.22								
50	ATOM	1009	CA	LYS	335	38.026	44.850	66.211	1.00
	15.61								
	ATOM	1010	CB	LYS	335	38.742	43.501	66.098	1.00
	18.74								
	ATOM	1011	CG	LYS	335	40.159	43.493	66.675	1.00
	22.01								
55	ATOM	1012	CD	LYS	335	40.737	42.086	66.747	1.00
	27.64								
	ATOM	1013	CE	LYS	335	42.031	42.044	67.603	1.00
	29.38								

	ATOM	1014	NZ	LYS	335	42.383	40.621	68.013	1.00
	31.04								
	ATOM	1018	C	LYS	335	36.747	44.814	65.372	1.00
	16.01								
5	ATOM	1019	O	LYS	335	36.824	44.709	64.139	1.00
	15.29								
	ATOM	1020	N	LEU	336	35.575	44.884	66.004	1.00
	12.73								
10	ATOM	1022	CA	LEU	336	34.317	44.804	65.218	1.00
	11.81								
	ATOM	1023	CB	LEU	336	33.094	44.732	66.148	1.00
	12.02								
	ATOM	1024	CG	LEU	336	33.012	43.570	67.175	1.00
	13.35								
15	ATOM	1025	CD1	LEU	336	31.657	43.583	67.836	1.00
	12.43								
	ATOM	1026	CD2	LEU	336	33.251	42.218	66.515	1.00
	14.13								
20	ATOM	1027	C	LEU	336	34.117	45.968	64.252	1.00
	10.72								
	ATOM	1028	O	LEU	336	34.325	47.107	64.598	1.00
	13.53								
	ATOM	1029	N	THR	337	33.666	45.643	63.045	1.00
	11.51								
25	ATOM	1031	CA	THR	337	33.381	46.634	62.007	1.00
	12.15								
	ATOM	1032	CB	THR	337	33.218	45.947	60.615	1.00
	12.79								
30	ATOM	1033	OG1	THR	337	32.154	44.956	60.676	1.00
	12.22								
	ATOM	1035	CG2	THR	337	34.519	45.285	60.216	1.00
	16.26								
	ATOM	1036	C	THR	337	32.057	47.342	62.297	1.00
	10.27								
35	ATOM	1037	O	THR	337	31.229	46.817	63.091	1.00
	5.25								
	ATOM	1038	N	ILE	338	31.862	48.504	61.690	1.00
	8.59								
40	ATOM	1040	CA	ILE	338	30.615	49.200	61.846	1.00
	7.74								
	ATOM	1041	CB	ILE	338	30.579	50.505	61.001	1.00
	10.71								
	ATOM	1042	CG2	ILE	338	30.765	50.197	59.517	1.00
	11.93								
45	ATOM	1043	CG1	ILE	338	29.278	51.266	61.284	1.00
	8.47								
	ATOM	1044	CD1	ILE	338	29.254	51.745	62.769	1.00
	12.52								
50	ATOM	1045	C	ILE	338	29.467	48.298	61.413	1.00
	6.40								
	ATOM	1046	O	ILE	338	28.363	48.402	61.924	1.00
	5.38								
	ATOM	1047	N	ASN	339	29.695	47.468	60.386	1.00
	7.04								
55	ATOM	1049	CA	ASN	339	28.669	46.535	59.910	1.00
	9.44								
	ATOM	1050	CB	ASN	339	29.214	45.704	58.744	1.00
	12.90								

	ATOM 19.02	1051	CG	ASN	339	28.238	44.649	58.244	1.00
	ATOM 21.28	1052	OD1	ASN	339	28.450	43.440	58.443	1.00
5	ATOM 19.72	1053	ND2	ASN	339	27.197	45.086	57.522	1.00
	ATOM 6.95	1056	C	ASN	339	28.192	45.606	61.018	1.00
10	ATOM 6.04	1057	O	ASN	339	27.000	45.406	61.199	1.00
	ATOM 6.39	1058	N	LYS	340	29.139	45.038	61.772	1.00
	ATOM 6.76	1060	CA	LYS	340	28.769	44.129	62.873	1.00
15	ATOM 7.37	1061	CB	LYS	340	29.985	43.333	63.361	1.00
	ATOM 7.98	1062	CG	LYS	340	29.723	42.361	64.575	1.00
20	ATOM 9.32	1063	CD	LYS	340	28.663	41.312	64.238	1.00
	ATOM 7.68	1064	CE	LYS	340	28.325	40.403	65.435	1.00
	ATOM 11.81	1065	NZ	LYS	340	27.121	39.561	65.006	1.00
25	ATOM 6.46	1069	C	LYS	340	28.090	44.877	64.015	1.00
	ATOM 7.41	1070	O	LYS	340	27.180	44.361	64.669	1.00
30	ATOM 4.91	1071	N	LEU	341	28.524	46.122	64.273	1.00
	ATOM 4.71	1073	CA	LEU	341	27.892	46.926	65.316	1.00
	ATOM 6.87	1074	CB	LEU	341	28.662	48.275	65.487	1.00
35	ATOM 5.50	1075	CG	LEU	341	30.145	48.170	65.917	1.00
	ATOM 7.84	1076	CD1	LEU	341	30.792	49.563	66.144	1.00
40	ATOM 4.44	1077	CD2	LEU	341	30.228	47.397	67.217	1.00
	ATOM 6.72	1078	C	LEU	341	26.426	47.218	64.906	1.00
	ATOM 6.30	1079	O	LEU	341	25.554	47.223	65.734	1.00
45	ATOM 6.60	1080	N	LEU	342	26.199	47.479	63.610	1.00
	ATOM 8.16	1082	CA	LEU	342	24.852	47.780	63.101	1.00
50	ATOM 8.76	1083	CB	LEU	342	24.924	48.248	61.648	1.00
	ATOM 16.74	1084	CG	LEU	342	24.817	49.735	61.222	1.00
	ATOM 13.92	1085	CD1	LEU	342	24.670	50.708	62.352	1.00
55	ATOM 11.93	1086	CD2	LEU	342	25.895	50.108	60.186	1.00
	ATOM 6.33	1087	C	LEU	342	23.973	46.546	63.229	1.00

	ATOM 4.73	1088	O	LEU	342	22.806	46.636	63.598	1.00
	ATOM 7.09	1089	N	ASP	343	24.571	45.408	62.903	1.00
5	ATOM 7.37	1091	CA	ASP	343	23.914	44.099	63.063	1.00
	ATOM 6.99	1092	CB	ASP	343	24.909	42.987	62.660	1.00
10	ATOM 7.27	1093	CG	ASP	343	24.466	41.581	63.110	1.00
	ATOM 4.56	1094	OD1	ASP	343	23.262	41.350	63.309	1.00
	ATOM 6.70	1095	OD2	ASP	343	25.337	40.719	63.252	1.00
15	ATOM 7.54	1096	C	ASP	343	23.501	43.949	64.529	1.00
	ATOM 7.54	1097	O	ASP	343	22.342	43.697	64.838	1.00
20	ATOM 6.41	1098	N	MET	344	24.436	44.153	65.457	1.00
	ATOM 9.49	1100	CA	MET	344	24.081	44.047	66.885	1.00
	ATOM 8.91	1101	CB	MET	344	25.316	44.208	67.804	1.00
25	ATOM 12.32	1102	CG	MET	344	26.413	43.141	67.567	1.00
	ATOM 16.89	1103	SD	MET	344	27.888	43.520	68.539	1.00
30	ATOM 18.02	1104	CE	MET	344	28.005	42.104	69.644	1.00
	ATOM 7.42	1105	C	MET	344	22.962	45.016	67.328	1.00
	ATOM 7.37	1106	O	MET	344	22.060	44.644	68.090	1.00
35	ATOM 5.31	1107	N	ALA	345	23.005	46.250	66.812	1.00
	ATOM 2.94	1109	CA	ALA	345	21.943	47.219	67.162	1.00
40	ATOM 2.00	1110	CB	ALA	345	22.257	48.613	66.496	1.00
	ATOM 2.66	1111	C	ALA	345	20.581	46.698	66.674	1.00
	ATOM 3.94	1112	O	ALA	345	19.568	46.823	67.371	1.00
45	ATOM 3.10	1113	N	ALA	346	20.563	46.121	65.465	1.00
	ATOM 5.34	1115	CA	ALA	346	19.353	45.540	64.894	1.00
50	ATOM 3.35	1116	CB	ALA	346	19.548	45.098	63.372	1.00
	ATOM 5.71	1117	C	ALA	346	18.825	44.378	65.729	1.00
	ATOM 4.47	1118	O	ALA	346	17.620	44.299	65.955	1.00
55	ATOM 2.71	1119	N	GLN	347	19.720	43.528	66.231	1.00
	ATOM 4.60	1121	CA	GLN	347	19.307	42.428	67.141	1.00

5	ATOM 2.74	1122	CB	GLN	347	20.537	41.592	67.562	1.00
	ATOM 5.37	1123	CG	GLN	347	21.216	40.940	66.362	1.00
	ATOM 7.37	1124	CD	GLN	347	22.320	39.965	66.751	1.00
	ATOM 8.75	1125	OE1	GLN	347	22.353	39.486	67.855	1.00
	ATOM 5.62	1126	NE2	GLN	347	23.175	39.635	65.804	1.00
10	ATOM 4.10	1129	C	GLN	347	18.611	42.971	68.414	1.00
	ATOM 5.67	1130	O	GLN	347	17.575	42.455	68.863	1.00
	ATOM 2.95	1131	N	ILE	348	19.153	44.050	68.940	1.00
15	ATOM 4.54	1133	CA	ILE	348	18.628	44.666	70.150	1.00
	ATOM 4.65	1134	CB	ILE	348	19.624	45.759	70.691	1.00
	ATOM 3.08	1135	CG2	ILE	348	19.039	46.538	71.882	1.00
	ATOM 3.26	1136	CG1	ILE	348	20.921	45.080	71.163	1.00
	ATOM 5.43	1137	CD1	ILE	348	22.039	46.103	71.381	1.00
20	ATOM 5.36	1138	C	ILE	348	17.268	45.264	69.885	1.00
	ATOM 4.39	1139	O	ILE	348	16.338	45.032	70.674	1.00
	ATOM 4.26	1140	N	ALA	349	17.137	45.971	68.750	1.00
25	ATOM 5.91	1142	CA	ALA	349	15.829	46.544	68.363	1.00
	ATOM 3.48	1143	CB	ALA	349	15.966	47.377	67.099	1.00
	ATOM 5.32	1144	C	ALA	349	14.794	45.409	68.122	1.00
	ATOM 4.56	1145	O	ALA	349	13.601	45.564	68.351	1.00
	ATOM 5.83	1146	N	GLU	350	15.282	44.267	67.641	1.00
30	ATOM 6.21	1148	CA	GLU	350	14.389	43.127	67.360	1.00
	ATOM 8.90	1149	CB	GLU	350	15.156	42.033	66.591	1.00
	ATOM 9.23	1150	CG	GLU	350	14.330	40.790	66.305	1.00
35	ATOM 12.88	1151	CD	GLU	350	15.141	39.730	65.550	1.00
	ATOM 12.40	1152	OE1	GLU	350	16.194	40.044	64.946	1.00
	ATOM 13.17	1153	OE2	GLU	350	14.724	38.558	65.564	1.00
40	ATOM 3.70	1154	C	GLU	350	13.807	42.575	68.648	1.00
	ATOM 3.99	1155	O	GLU	350	12.576	42.238	68.754	1.00

	ATOM	1156	N	GLY	351	14.664	42.494	69.666	1.00
	3.72								
	ATOM	1158	CA	GLY	351	14.177	42.064	70.985	1.00
	2.74								
5	ATOM	1159	C	GLY	351	13.231	43.110	71.585	1.00
	3.98								
	ATOM	1160	O	GLY	351	12.206	42.742	72.204	1.00
	2.73								
10	ATOM	1161	N	MET	352	13.563	44.402	71.478	1.00
	3.10								
	ATOM	1163	CA	MET	352	12.672	45.431	72.017	1.00
	3.20								
	ATOM	1164	CB	MET	352	13.346	46.839	71.992	1.00
	4.15								
15	ATOM	1165	CG	MET	352	14.463	46.987	73.003	1.00
	2.46								
	ATOM	1166	SD	MET	352	13.963	46.634	74.672	1.00
	8.88								
20	ATOM	1167	CE	MET	352	12.466	47.792	74.796	1.00
	7.85								
	ATOM	1168	C	MET	352	11.317	45.481	71.244	1.00
	4.14								
	ATOM	1169	O	MET	352	10.298	45.901	71.790	1.00
	4.32								
25	ATOM	1170	N	ALA	353	11.345	45.131	69.947	1.00
	4.31								
	ATOM	1172	CA	ALA	353	10.114	45.102	69.161	1.00
	4.60								
30	ATOM	1173	CB	ALA	353	10.433	44.852	67.643	1.00
	4.58								
	ATOM	1174	C	ALA	353	9.184	44.019	69.694	1.00
	5.84								
	ATOM	1175	O	ALA	353	7.950	44.175	69.740	1.00
	4.41								
35	ATOM	1176	N	PHE	354	9.773	42.911	70.170	1.00
	6.70								
	ATOM	1178	CA	PHE	354	8.962	41.835	70.790	1.00
	6.33								
40	ATOM	1179	CB	PHE	354	9.811	40.577	71.057	1.00
	6.88								
	ATOM	1180	CG	PHE	354	9.080	39.481	71.829	1.00
	9.26								
	ATOM	1181	CD1	PHE	354	8.023	38.781	71.242	1.00
	9.54								
45	ATOM	1182	CD2	PHE	354	9.429	39.186	73.138	1.00
	8.40								
	ATOM	1183	CE1	PHE	354	7.346	37.781	71.957	1.00
	11.15								
50	ATOM	1184	CE2	PHE	354	8.752	38.184	73.867	1.00
	11.06								
	ATOM	1185	CZ	PHE	354	7.698	37.492	73.270	1.00
	8.67								
	ATOM	1186	C	PHE	354	8.360	42.313	72.089	1.00
	5.01								
55	ATOM	1187	O	PHE	354	7.162	42.111	72.360	1.00
	5.21								
	ATOM	1188	N	ILE	355	9.186	42.981	72.909	1.00
	4.92								

	ATOM	1190	CA	ILE	355	8.725	43.546	74.191	1.00
	3.39								
	ATOM	1191	CB	ILE	355	9.910	44.209	74.960	1.00
	4.12								
5	ATOM	1192	CG2	ILE	355	9.446	45.113	76.167	1.00
	3.25								
	ATOM	1193	CG1	ILE	355	10.833	43.105	75.480	1.00
	3.89								
10	ATOM	1194	CD1	ILE	355	12.153	43.638	76.042	1.00
	6.62								
	ATOM	1195	C	ILE	355	7.597	44.548	73.950	1.00
	4.30								
	ATOM	1196	O	ILE	355	6.566	44.533	74.627	1.00
	2.05								
15	ATOM	1197	N	GLU	356	7.783	45.361	72.917	1.00
	5.49								
	ATOM	1199	CA	GLU	356	6.808	46.345	72.527	1.00
	7.59								
20	ATOM	1200	CB	GLU	356	7.382	47.158	71.359	1.00
	8.33								
	ATOM	1201	CG	GLU	356	6.463	48.069	70.575	1.00
	11.40								
	ATOM	1202	CD	GLU	356	7.238	48.763	69.411	1.00
	13.48								
25	ATOM	1203	OE1	GLU	356	7.350	48.218	68.250	1.00
	15.78								
	ATOM	1204	OE2	GLU	356	7.756	49.864	69.664	1.00
	14.27								
30	ATOM	1205	C	GLU	356	5.475	45.692	72.132	1.00
	8.84								
	ATOM	1206	O	GLU	356	4.424	46.054	72.629	1.00
	7.97								
	ATOM	1207	N	GLU	357	5.517	44.734	71.225	1.00
	10.18								
35	ATOM	1209	CA	GLU	357	4.263	44.097	70.820	1.00
	11.61								
	ATOM	1210	CB	GLU	357	4.408	43.355	69.495	1.00
	16.07								
40	ATOM	1211	CG	GLU	357	4.880	41.974	69.512	1.00
	24.33								
	ATOM	1212	CD	GLU	357	3.799	40.973	69.812	1.00
	28.19								
	ATOM	1213	OE1	GLU	357	4.125	40.049	70.565	1.00
	31.78								
45	ATOM	1214	OE2	GLU	357	2.649	41.078	69.322	1.00
	30.15								
	ATOM	1215	C	GLU	357	3.501	43.309	71.911	1.00
	10.18								
50	ATOM	1216	O	GLU	357	2.289	43.180	71.842	1.00
	9.51								
	ATOM	1217	N	ARG	358	4.205	42.869	72.956	1.00
	6.49								
	ATOM	1219	CA	ARG	358	3.574	42.182	74.061	1.00
	7.45								
55	ATOM	1220	CB	ARG	358	4.592	41.215	74.730	1.00
	8.83								
	ATOM	1221	CG	ARG	358	5.135	40.069	73.849	1.00
	7.95								



	ATOM	1222	CD	ARG	358	3.999	39.232	73.218	1.00
	12.64								
	ATOM	1223	NE	ARG	358	2.929	38.875	74.159	1.00
	16.71								
5	ATOM	1225	CZ	ARG	358	1.665	38.636	73.797	1.00
	17.48								
	ATOM	1226	NH1	ARG	358	1.296	38.710	72.515	1.00
	16.26								
10	ATOM	1229	NH2	ARG	358	0.740	38.415	74.720	1.00
	18.05								
	ATOM	1232	C	ARG	358	3.040	43.157	75.124	1.00
	7.52								
	ATOM	1233	O	ARG	358	2.591	42.738	76.211	1.00
	7.17								
15	ATOM	1234	N	ASN	359	3.161	44.465	74.860	1.00
	6.81								
	ATOM	1236	CA	ASN	359	2.694	45.491	75.800	1.00
	8.64								
	ATOM	1237	CB	ASN	359	1.188	45.327	76.159	1.00
20	9.29								
	ATOM	1238	CG	ASN	359	0.300	45.844	75.061	1.00
	10.37								
	ATOM	1239	OD1	ASN	359	0.795	46.342	74.072	1.00
	12.00								
25	ATOM	1240	ND2	ASN	359	-1.018	45.678	75.204	1.00
	12.20								
	ATOM	1243	C	ASN	359	3.511	45.652	77.050	1.00
	8.02								
	ATOM	1244	O	ASN	359	2.995	46.046	78.108	1.00
30	9.17								
	ATOM	1245	N	TYR	360	4.801	45.314	76.963	1.00
	5.75								
	ATOM	1247	CA	TYR	360	5.669	45.520	78.112	1.00
	5.81								
35	ATOM	1248	CB	TYR	360	6.541	44.275	78.342	1.00
	6.39								
	ATOM	1249	CG	TYR	360	5.816	43.136	79.021	1.00
	7.87								
	ATOM	1250	CD1	TYR	360	5.033	42.243	78.288	1.00
40	9.17								
	ATOM	1251	CE1	TYR	360	4.359	41.181	78.927	1.00
	11.35								
	ATOM	1252	CD2	TYR	360	5.909	42.967	80.389	1.00
	9.95								
45	ATOM	1253	CE2	TYR	360	5.231	41.931	81.035	1.00
	11.89								
	ATOM	1254	CZ	TYR	360	4.464	41.063	80.309	1.00
	11.40								
	ATOM	1255	OH	TYR	360	3.752	40.116	81.010	1.00
50	13.19								
	ATOM	1257	C	TYR	360	6.621	46.687	77.853	1.00
	5.77								
	ATOM	1258	O	TYR	360	6.719	47.189	76.730	1.00
	5.39								
55	ATOM	1259	N	ILE	361	7.307	47.122	78.909	1.00
	6.08								
	ATOM	1261	CA	ILE	361	8.351	48.130	78.812	1.00
	6.60								

	ATOM	1262	CB	ILE	361	7.949	49.538	79.349	1.00
	7.46								
	ATOM	1263	CG2	ILE	361	6.981	50.231	78.354	1.00
	7.70								
5	ATOM	1264	CG1	ILE	361	7.350	49.430	80.744	1.00
	7.66								
	ATOM	1265	CD1	ILE	361	7.111	50.762	81.390	1.00
	7.95								
10	ATOM	1266	C	ILE	361	9.496	47.570	79.658	1.00
	7.68								
	ATOM	1267	O	ILE	361	9.236	46.794	80.605	1.00
	6.94								
	ATOM	1268	N	HIS	362	10.722	47.990	79.382	1.00
	5.85								
15	ATOM	1270	CA	HIS	362	11.865	47.457	80.114	1.00
	6.16								
	ATOM	1271	CB	HIS	362	12.944	47.124	79.071	1.00
	5.50								
	ATOM	1272	CG	HIS	362	14.150	46.453	79.609	1.00
20	7.36								
	ATOM	1273	CD2	HIS	362	14.599	45.170	79.503	1.00
	6.35								
	ATOM	1274	ND1	HIS	362	15.119	47.120	80.343	1.00
	7.52								
25	ATOM	1276	CE1	HIS	362	16.091	46.293	80.658	1.00
	7.49								
	ATOM	1277	NE2	HIS	362	15.807	45.106	80.156	1.00
	6.81								
30	ATOM	1279	C	HIS	362	12.371	48.418	81.211	1.00
	4.64								
	ATOM	1280	O	HIS	362	12.588	48.033	82.369	1.00
	5.59								
	ATOM	1281	N	ARG	363	12.491	49.679	80.831	1.00
	7.45								
35	ATOM	1283	CA	ARG	363	12.913	50.783	81.704	1.00
	8.43								
	ATOM	1284	CB	ARG	363	12.035	50.835	82.970	1.00
	7.51								
	ATOM	1285	CG	ARG	363	10.576	51.119	82.644	1.00
40	10.25								
	ATOM	1286	CD	ARG	363	9.897	51.683	83.914	1.00
	10.59								
	ATOM	1287	NE	ARG	363	9.912	50.722	84.981	1.00
	11.72								
45	ATOM	1289	CZ	ARG	363	9.861	51.032	86.279	1.00
	14.15								
	ATOM	1290	NH1	ARG	363	9.808	52.301	86.646	1.00
	13.54								
	ATOM	1293	NH2	ARG	363	9.797	50.061	87.195	1.00
50	12.03								
	ATOM	1296	C	ARG	363	14.372	50.882	82.117	1.00
	7.44								
	ATOM	1297	O	ARG	363	14.723	51.804	82.809	1.00
	7.42								
55	ATOM	1298	N	ASP	364	15.221	50.000	81.634	1.00
	8.20								
	ATOM	1300	CA	ASP	364	16.643	50.022	82.025	1.00
	7.94								

	ATOM	1301	CB	ASP	364	16.832	49.052	83.198	1.00
	7.03								
	ATOM	1302	CG	ASP	364	18.059	49.370	84.068	1.00
	11.50								
5	ATOM	1303	OD1	ASP	364	18.799	50.329	83.807	1.00
	11.51								
	ATOM	1304	OD2	ASP	364	18.264	48.627	85.043	1.00
	12.82								
10	ATOM	1305	C	ASP	364	17.473	49.590	80.842	1.00
	6.20								
	ATOM	1306	O	ASP	364	18.410	48.799	80.968	1.00
	5.54								
	ATOM	1307	N	LEU	365	17.034	50.044	79.663	1.00
	5.04								
15	ATOM	1309	CA	LEU	365	17.656	49.725	78.389	1.00
	4.56								
	ATOM	1310	CB	LEU	365	16.672	50.008	77.222	1.00
	3.62								
20	ATOM	1311	CG	LEU	365	17.135	49.719	75.771	1.00
	4.02								
	ATOM	1312	CD1	LEU	365	17.593	48.293	75.631	1.00
	4.75								
	ATOM	1313	CD2	LEU	365	16.034	50.008	74.773	1.00
	5.53								
25	ATOM	1314	C	LEU	365	18.945	50.539	78.213	1.00
	7.89								
	ATOM	1315	O	LEU	365	18.897	51.775	78.082	1.00
	8.70								
30	ATOM	1316	N	ARG	366	20.072	49.847	78.307	1.00
	6.02								
	ATOM	1318	CA	ARG	366	21.398	50.414	78.170	1.00
	7.65								
	ATOM	1319	CB	ARG	366	21.837	51.023	79.508	1.00
	9.30								
35	ATOM	1320	CG	ARG	366	21.673	50.061	80.689	1.00
	12.26								
	ATOM	1321	CD	ARG	366	21.894	50.794	82.011	1.00
	16.24								
40	ATOM	1322	NE	ARG	366	23.214	51.410	82.088	1.00
	19.64								
	ATOM	1324	CZ	ARG	366	23.503	52.394	82.930	1.00
	23.12								
	ATOM	1325	NH1	ARG	366	22.556	52.850	83.748	1.00
	24.99								
45	ATOM	1328	NH2	ARG	366	24.715	52.926	82.955	1.00
	22.43								
	ATOM	1331	C	ARG	366	22.324	49.265	77.787	1.00
	7.09								
	ATOM	1332	O	ARG	366	21.982	48.103	78.058	1.00
50	6.44								
	ATOM	1333	N	ALA	367	23.516	49.586	77.286	1.00
	6.74								
	ATOM	1335	CA	ALA	367	24.460	48.562	76.868	1.00
	5.67								
55	ATOM	1336	CB	ALA	367	25.733	49.199	76.238	1.00
	3.81								
	ATOM	1337	C	ALA	367	24.852	47.653	78.034	1.00
	6.22								

	ATOM	1338	O	ALA	367	25.191	46.502	77.806	1.00
	8.48								
	ATOM	1339	N	ALA	368	24.815	48.157	79.278	1.00
	4.60								
5	ATOM	1341	CA	ALA	368	25.163	47.268	80.399	1.00
	5.77								
	ATOM	1342	CB	ALA	368	25.235	48.038	81.749	1.00
	7.66								
10	ATOM	1343	C	ALA	368	24.161	46.098	80.500	1.00
	5.40								
	ATOM	1344	O	ALA	368	24.511	44.968	80.918	1.00
	6.12								
	ATOM	1345	N	ASN	369	22.935	46.343	80.058	1.00
	5.01								
15	ATOM	1347	CA	ASN	369	21.888	45.330	80.097	1.00
	5.36								
	ATOM	1348	CB	ASN	369	20.623	45.916	80.696	1.00
	4.47								
	ATOM	1349	CG	ASN	369	20.795	46.215	82.153	1.00
	6.74								
20	ATOM	1350	OD1	ASN	369	21.544	45.516	82.817	1.00
	5.37								
	ATOM	1351	ND2	ASN	369	20.176	47.284	82.642	1.00
	4.83								
25	ATOM	1354	C	ASN	369	21.616	44.538	78.810	1.00
	6.12								
	ATOM	1355	O	ASN	369	20.531	43.978	78.607	1.00
	7.80								
30	ATOM	1356	N	ILE	370	22.594	44.558	77.910	1.00
	5.52								
	ATOM	1358	CA	ILE	370	22.513	43.778	76.702	1.00
	4.05								
	ATOM	1359	CB	ILE	370	22.806	44.620	75.434	1.00
	5.37								
35	ATOM	1360	CG2	ILE	370	22.870	43.667	74.213	1.00
	2.00								
	ATOM	1361	CG1	ILE	370	21.740	45.735	75.298	1.00
	2.00								
40	ATOM	1362	CD1	ILE	370	20.271	45.186	75.440	1.00
	2.00								
	ATOM	1363	C	ILE	370	23.630	42.766	76.896	1.00
	5.96								
	ATOM	1364	O	ILE	370	24.759	43.164	77.265	1.00
	5.26								
45	ATOM	1365	N	LEU	371	23.310	41.491	76.754	1.00
	6.77								
	ATOM	1366	H	LEU	371	22.404	41.249	76.524	1.00
	20.00								
50	ATOM	1367	CA	LEU	371	24.310	40.410	76.951	1.00
	5.25								
	ATOM	1368	CB	LEU	371	23.697	39.300	77.849	1.00
	5.80								
	ATOM	1369	CG	LEU	371	24.000	39.250	79.342	1.00
	8.15								
55	ATOM	1370	CD1	LEU	371	24.465	40.553	79.905	1.00
	8.54								
	ATOM	1371	CD2	LEU	371	22.953	38.500	80.228	1.00
	5.22								

5	ATOM 6.17	1372	C	LEU	371	24.729	39.871	75.607	1.00
	ATOM 6.29	1373	O	LEU	371	23.922	39.893	74.657	1.00
	ATOM 4.90	1374	N	VAL	372	25.999	39.457	75.505	1.00
	ATOM 6.66	1376	CA	VAL	372	26.568	38.935	74.275	1.00
10	ATOM 5.80	1377	CB	VAL	372	27.838	39.743	73.853	1.00
	ATOM 5.19	1378	CG1	VAL	372	28.259	39.341	72.425	1.00
	ATOM 7.50	1379	CG2	VAL	372	27.569	41.288	73.960	1.00
	ATOM 4.98	1380	C	VAL	372	26.907	37.437	74.351	1.00
15	ATOM 5.78	1381	O	VAL	372	27.554	36.988	75.265	1.00
	ATOM 7.12	1382	N	SER	373	26.434	36.672	73.372	1.00
	ATOM 7.38	1384	CA	SER	373	26.662	35.231	73.320	1.00
	ATOM 7.48	1385	CB	SER	373	25.583	34.524	72.455	1.00
20	ATOM 5.48	1386	OG	SER	373	25.791	34.804	71.073	1.00
	ATOM 9.13	1388	C	SER	373	28.019	34.899	72.757	1.00
	ATOM 8.18	1389	O	SER	373	28.723	35.753	72.197	1.00
	ATOM 8.64	1390	N	ASP	374	28.359	33.619	72.805	1.00
25	ATOM 9.08	1392	CA	ASP	374	29.626	33.194	72.265	1.00
	ATOM 9.32	1393	CB	ASP	374	29.854	31.727	72.644	1.00
	ATOM 11.97	1394	CG	ASP	374	28.900	30.809	71.944	1.00
	ATOM 14.88	1395	OD1	ASP	374	27.709	31.136	71.917	1.00
30	ATOM 15.30	1396	OD2	ASP	374	29.333	29.804	71.339	1.00
	ATOM 9.93	1397	C	ASP	374	29.678	33.397	70.740	1.00
	ATOM 10.12	1398	O	ASP	374	30.752	33.485	70.159	1.00
	ATOM 7.98	1399	N	THR	375	28.519	33.487	70.070	1.00
35	ATOM 8.27	1401	CA	THR	375	28.509	33.720	68.613	1.00
	ATOM 8.75	1402	CB	THR	375	27.415	32.873	67.900	1.00
	ATOM 10.07	1403	OG1	THR	375	26.127	33.281	68.402	1.00
	ATOM 7.62	1405	CG2	THR	375	27.566	31.382	68.169	1.00
55	ATOM 8.45	1406	C	THR	375	28.289	35.213	68.258	1.00

5	ATOM 8.09	1407	O	THR	375	27.968	35.566	67.137	1.00
	ATOM 8.22	1408	N	LEU	376	28.468	36.088	69.248	1.00
	ATOM 9.33	1410	CA	LEU	376	28.307	37.521	69.080	1.00
	ATOM 8.40	1411	CB	LEU	376	29.290	38.110	68.046	1.00
10	ATOM 12.51	1412	CG	LEU	376	30.755	37.717	68.339	1.00
	ATOM 14.37	1413	CD1	LEU	376	31.719	38.480	67.387	1.00
	ATOM 14.45	1414	CD2	LEU	376	31.094	37.986	69.824	1.00
15	ATOM 9.24	1415	C	LEU	376	26.877	37.947	68.736	1.00
	ATOM 8.58	1416	O	LEU	376	26.691	38.800	67.869	1.00
	ATOM 6.91	1417	N	SER	377	25.898	37.206	69.255	1.00
20	ATOM 6.35	1419	CA	SER	377	24.507	37.607	69.085	1.00
	ATOM 3.06	1420	CB	SER	377	23.568	36.419	68.736	1.00
	ATOM 7.61	1421	OG	SER	377	23.581	35.453	69.779	1.00
25	ATOM 5.91	1423	C	SER	377	24.169	38.271	70.405	1.00
	ATOM 5.71	1424	O	SER	377	24.836	37.965	71.457	1.00
	ATOM 4.65	1425	N	CYS	378	23.247	39.227	70.371	1.00
	ATOM 5.21	1427	CA	CYS	378	22.863	39.987	71.539	1.00
35	ATOM 6.09	1428	CB	CYS	378	22.851	41.492	71.171	1.00
	ATOM 13.86	1429	SG	CYS	378	24.490	42.098	70.729	1.00
	ATOM 5.68	1430	C	CYS	378	21.476	39.652	72.034	1.00
40	ATOM 3.41	1431	O	CYS	378	20.571	39.390	71.237	1.00
	ATOM 5.79	1432	N	LYS	379	21.299	39.790	73.344	1.00
	ATOM 6.15	1434	CA	LYS	379	20.028	39.568	73.979	1.00
45	ATOM 5.70	1435	CB	LYS	379	19.968	38.126	74.557	1.00
	ATOM 5.57	1436	CG	LYS	379	20.024	37.069	73.428	1.00
	ATOM 7.05	1437	CD	LYS	379	19.695	35.653	73.895	1.00
	ATOM 8.56	1438	CE	LYS	379	19.965	34.712	72.713	1.00
55	ATOM 5.14	1439	NZ	LYS	379	19.168	33.450	72.774	1.00
	ATOM 6.59	1443	C	LYS	379	19.774	40.570	75.101	1.00

	ATOM 6.88	1444	O	LYS	379	20.688	41.019	75.798	1.00
	ATOM 6.01	1445	N	ILE	380	18.503	40.923	75.260	1.00
5	ATOM 4.05	1447	CA	ILE	380	18.088	41.817	76.308	1.00
	ATOM 4.23	1448	CB	ILE	380	16.676	42.413	75.983	1.00
10	ATOM 4.05	1449	CG2	ILE	380	16.211	43.363	77.114	1.00
	ATOM 7.39	1450	CG1	ILE	380	16.740	43.090	74.596	1.00
	ATOM 7.36	1451	CD1	ILE	380	15.437	43.643	74.134	1.00
15	ATOM 4.63	1452	C	ILE	380	18.052	41.096	77.637	1.00
	ATOM 4.54	1453	O	ILE	380	17.506	39.972	77.753	1.00
20	ATOM 3.68	1454	N	ALA	381	18.600	41.753	78.665	1.00
	ATOM 5.86	1456	CA	ALA	381	18.646	41.193	79.985	1.00
	ATOM 4.71	1457	CB	ALA	381	20.124	40.726	80.309	1.00
25	ATOM 6.27	1458	C	ALA	381	18.171	42.187	81.075	1.00
	ATOM 6.81	1459	O	ALA	381	17.897	43.391	80.826	1.00
30	ATOM 7.15	1460	N	ASP	382	18.143	41.662	82.287	1.00
	ATOM 6.71	1462	CA	ASP	382	17.753	42.393	83.495	1.00
	ATOM 9.17	1463	CB	ASP	382	18.777	43.460	83.844	1.00
35	ATOM 12.95	1464	CG	ASP	382	18.576	44.005	85.266	1.00
	ATOM 16.02	1465	OD1	ASP	382	19.508	44.625	85.778	1.00
40	ATOM 12.88	1466	OD2	ASP	382	17.515	43.747	85.882	1.00
	ATOM 8.02	1467	C	ASP	382	16.390	43.016	83.401	1.00
	ATOM 8.10	1468	O	ASP	382	16.241	44.204	83.113	1.00
45	ATOM 7.98	1469	N	PHE	383	15.384	42.209	83.699	1.00
	ATOM 8.46	1471	CA	PHE	383	13.996	42.627	83.655	1.00
50	ATOM 8.36	1472	CB	PHE	383	13.180	41.433	83.124	1.00
	ATOM 11.11	1473	CG	PHE	383	13.564	41.017	81.709	1.00
	ATOM 11.02	1474	CD1	PHE	383	12.949	41.607	80.607	1.00
55	ATOM 10.97	1475	CD2	PHE	383	14.592	40.111	81.489	1.00
	ATOM 11.05	1476	CE1	PHE	383	13.380	41.293	79.283	1.00

5	ATOM 13.87	1477	CE2	PHE	383	15.013	39.802	80.166	1.00
	ATOM 9.97	1478	CZ	PHE	383	14.408	40.400	79.082	1.00
	ATOM 8.84	1479	C	PHE	383	13.459	43.104	85.023	1.00
	ATOM 9.41	1480	O	PHE	383	12.281	43.006	85.287	1.00
10	ATOM 9.27	1481	N	GLY	384	14.351	43.566	85.891	1.00
	ATOM 9.87	1483	CA	GLY	384	13.939	44.014	87.221	1.00
	ATOM 11.29	1484	C	GLY	384	12.934	45.151	87.217	1.00
15	ATOM 8.71	1485	O	GLY	384	11.997	45.191	88.033	1.00
	ATOM 9.04	1486	N	LEU	385	13.131	46.103	86.303	1.00
	ATOM 8.32	1488	CA	LEU	385	12.224	47.217	86.224	1.00
20	ATOM 9.56	1489	CB	LEU	385	13.035	48.490	85.924	1.00
	ATOM 10.82	1490	CG	LEU	385	13.985	48.890	87.070	1.00
	ATOM 13.00	1491	CD1	LEU	385	14.808	50.197	86.660	1.00
25	ATOM 11.41	1492	CD2	LEU	385	13.197	49.130	88.366	1.00
	ATOM 8.31	1493	C	LEU	385	11.131	47.037	85.199	1.00
	ATOM 7.36	1494	O	LEU	385	10.258	47.897	85.059	1.00
30	ATOM 6.60	1495	N	ALA	386	11.194	45.927	84.457	1.00
	ATOM 8.27	1497	CA	ALA	386	10.224	45.678	83.384	1.00
	ATOM 4.24	1498	CB	ALA	386	10.632	44.406	82.587	1.00
35	ATOM 9.72	1499	C	ALA	386	8.810	45.563	83.911	1.00
	ATOM 10.64	1500	O	ALA	386	8.602	44.969	84.987	1.00
	ATOM 9.50	1501	N	ARG	387	7.841	46.047	83.132	1.00
40	ATOM 11.62	1503	CA	ARG	387	6.430	46.084	83.531	1.00
	ATOM 11.18	1504	CB	ARG	387	6.080	47.473	84.106	1.00
	ATOM 16.85	1505	CG	ARG	387	6.824	47.881	85.379	1.00
45	ATOM 12.98	1506	CD	ARG	387	6.650	46.874	86.550	1.00
	ATOM 14.69	1507	NE	ARG	387	7.323	47.389	87.733	1.00
	ATOM 14.33	1509	CZ	ARG	387	8.473	46.964	88.256	1.00
55	ATOM 13.07	1510	NH1	ARG	387	9.178	45.951	87.724	1.00



	ATOM	1513	NH2	ARG	387	8.928	47.575	89.352	1.00
	14.51								
	ATOM	1516	C	ARG	387	5.446	45.880	82.394	1.00
	11.46								
5	ATOM	1517	O	ARG	387	5.706	46.265	81.267	1.00
	9.12								
	ATOM	1518	N	LEU	388	4.324	45.227	82.714	1.00
	12.72								
10	ATOM	1520	CA	LEU	388	3.248	45.031	81.775	1.00
	15.05								
	ATOM	1521	CB	LEU	388	2.345	43.844	82.196	1.00
	14.65								
	ATOM	1522	CG	LEU	388	1.060	43.555	81.375	1.00
	14.87								
15	ATOM	1523	CD1	LEU	388	1.351	43.464	79.893	1.00
	13.38								
	ATOM	1524	CD2	LEU	388	0.416	42.242	81.874	1.00
	14.82								
20	ATOM	1525	C	LEU	388	2.449	46.318	81.792	1.00
	17.48								
	ATOM	1526	O	LEU	388	2.098	46.839	82.847	1.00
	17.50								
	ATOM	1527	N	ILE	389	2.290	46.899	80.622	1.00
	20.52								
25	ATOM	1529	CA	ILE	389	1.560	48.120	80.420	1.00
	24.70								
	ATOM	1530	CB	ILE	389	2.178	48.835	79.198	1.00
	26.16								
30	ATOM	1531	CG2	ILE	389	1.254	49.885	78.627	1.00
	27.35								
	ATOM	1532	CG1	ILE	389	3.557	49.366	79.549	1.00
	26.34								
	ATOM	1533	CD1	ILE	389	3.586	50.174	80.857	1.00
	27.98								
35	ATOM	1534	C	ILE	389	0.061	47.828	80.162	1.00
	27.71								
	ATOM	1535	O	ILE	389	-0.322	47.340	79.089	1.00
	28.01								
40	ATOM	1536	N	GLU	390	-0.774	48.060	81.166	1.00
	29.07								
	ATOM	1538	CA	GLU	390	-2.221	47.851	81.036	1.00
	33.31								
	ATOM	1539	CB	GLU	390	-2.858	47.921	82.428	1.00
	35.64								
45	ATOM	1540	CG	GLU	390	-2.062	47.175	83.493	1.00
	38.85								
	ATOM	1541	CD	GLU	390	-2.423	45.698	83.589	1.00
	41.95								
	ATOM	1542	OE1	GLU	390	-3.519	45.302	83.111	1.00
50	43.61								
	ATOM	1543	OE2	GLU	390	-1.623	44.934	84.182	1.00
	44.08								
	ATOM	1544	C	GLU	390	-2.847	48.913	80.102	1.00
	35.51								
55	ATOM	1545	O	GLU	390	-3.491	48.588	79.107	1.00
	34.45								
	ATOM	1546	N	ASP	391	-2.695	50.191	80.464	1.00
	36.04								

	ATOM 37.62	1548	CA	ASP	391	-3.160	51.288	79.617	1.00
	ATOM 39.24	1549	CB	ASP	391	-3.698	52.456	80.450	1.00
5	ATOM 40.30	1550	CG	ASP	391	-5.195	52.345	80.720	1.00
	ATOM 41.07	1551	OD1	ASP	391	-5.570	52.062	81.881	1.00
10	ATOM 39.64	1552	OD2	ASP	391	-5.986	52.535	79.767	1.00
	ATOM 38.38	1553	C	ASP	391	-1.973	51.702	78.765	1.00
	ATOM 39.43	1554	O	ASP	391	-1.336	50.821	78.186	1.00
15	ATOM 36.06	1555	N	ALA	392	-1.635	52.976	78.645	1.00
	ATOM 35.60	1557	CA	ALA	392	-0.445	53.263	77.842	1.00
20	ATOM 36.17	1558	CB	ALA	392	-0.733	54.383	76.820	1.00
	ATOM 34.60	1559	C	ALA	392	0.806	53.611	78.653	1.00
	ATOM 33.20	1560	O	ALA	392	1.930	53.541	78.123	1.00
25	ATOM 33.89	1561	N	GLU	393	0.646	53.747	79.970	1.00
	ATOM 34.08	1563	CA	GLU	393	1.740	54.243	80.795	1.00
30	ATOM 36.56	1564	CB	GLU	393	1.482	55.762	80.859	1.00
	ATOM 41.00	1565	CG	GLU	393	2.562	56.693	81.308	1.00
	ATOM 43.97	1566	CD	GLU	393	2.130	58.166	81.130	1.00
35	ATOM 44.55	1567	OE1	GLU	393	1.076	58.563	81.679	1.00
	ATOM 45.51	1568	OE2	GLU	393	2.846	58.928	80.437	1.00
40	ATOM 32.38	1569	C	GLU	393	1.893	53.683	82.221	1.00
	ATOM 33.15	1570	O	GLU	393	0.924	53.346	82.896	1.00
	ATOM 29.72	1571	N	PTR	394	3.135	53.619	82.686	1.00
45	ATOM 28.19	1572	CA	PTR	394	3.450	53.199	84.044	1.00
	ATOM 26.93	1573	C	PTR	394	4.041	54.413	84.728	1.00
50	ATOM 26.68	1574	O	PTR	394	4.806	55.192	84.107	1.00
	ATOM 28.69	1575	CB	PTR	394	4.461	52.018	84.057	1.00
	ATOM 30.42	1576	CG	PTR	394	4.947	51.604	85.475	1.00
55	ATOM 31.83	1577	CD1	PTR	394	6.052	52.413	86.037	1.00
	ATOM 32.13	1578	CD2	PTR	394	4.438	50.580	86.206	1.00

	ATOM	1579	CE1	PTR	394	6.517	52.056	87.318	1.00
	34.02								
	ATOM	1580	CE2	PTR	394	4.903	50.219	87.487	1.00
	32.68								
5	ATOM	1581	CZ	PTR	394	5.976	50.995	88.021	1.00
	34.04								
	ATOM	1582	OH	PTR	394	6.505	50.679	89.298	1.00
	36.71								
10	ATOM	1583	P	PTR	394	6.117	49.669	90.441	1.00
	39.45								
	ATOM	1584	O1P	PTR	394	7.229	49.796	91.357	1.00
	39.10								
	ATOM	1585	O2P	PTR	394	5.920	48.150	90.168	1.00
	39.40								
15	ATOM	1586	O3P	PTR	394	4.923	50.270	90.894	1.00
	38.95								
	ATOM	1587	N	THR	395	3.590	54.670	85.950	1.00
	26.11								
20	ATOM	1589	CA	THR	395	4.088	55.800	86.722	1.00
	25.74								
	ATOM	1590	CB	THR	395	2.918	56.697	87.183	1.00
	24.73								
	ATOM	1591	OG1	THR	395	2.191	57.126	86.018	1.00
	24.08								
25	ATOM	1593	CG2	THR	395	3.438	57.927	87.934	1.00
	25.09								
	ATOM	1594	C	THR	395	4.860	55.306	87.920	1.00
	25.68								
30	ATOM	1595	O	THR	395	4.342	54.492	88.695	1.00
	24.31								
	ATOM	1596	N	ALA	396	6.140	55.668	87.984	1.00
	26.54								
	ATOM	1598	CA	ALA	396	6.989	55.278	89.098	1.00
	28.10								
35	ATOM	1599	CB	ALA	396	8.464	55.588	88.771	1.00
	27.74								
	ATOM	1600	C	ALA	396	6.547	56.073	90.312	1.00
	29.65								
40	ATOM	1601	O	ALA	396	5.877	57.104	90.150	1.00
	31.08								
	ATOM	1602	N	ARG	397	6.911	55.663	91.519	1.00
	31.81								
	ATOM	1604	CA	ARG	397	6.452	56.459	92.646	1.00
	34.40								
45	ATOM	1605	CB	ARG	397	5.970	55.570	93.780	1.00
	35.57								
	ATOM	1606	CG	ARG	397	6.985	55.307	94.848	1.00
	38.18								
50	ATOM	1607	CD	ARG	397	6.817	56.289	96.038	1.00
	40.04								
	ATOM	1608	NE	ARG	397	6.023	57.485	95.728	1.00
	40.90								
	ATOM	1610	CZ	ARG	397	4.703	57.582	95.897	1.00
	40.28								
55	ATOM	1611	NH1	ARG	397	4.018	56.556	96.373	1.00
	40.76								
	ATOM	1614	NH2	ARG	397	4.069	58.708	95.600	1.00
	40.55								

5	ATOM	1617	C	ARG	397	7.435	57.547	93.051	1.00
	34.46								
	ATOM	1618	O	ARG	397	8.630	57.455	92.768	1.00
10	34.83								
	ATOM	1619	N	ALA	398	6.869	58.640	93.559	1.00
	35.64								
15	ATOM	1621	CA	ALA	398	7.548	59.886	93.948	1.00
	35.34								
	ATOM	1622	CB	ALA	398	6.905	60.503	95.211	1.00
20	35.64								
	ATOM	1623	C	ALA	398	9.065	59.964	94.030	1.00
	34.51								
25	ATOM	1624	O	ALA	398	9.687	60.755	93.296	1.00
	36.64								
	ATOM	1625	N	GLY	399	9.679	59.176	94.902	1.00
30	34.00								
	ATOM	1627	CA	GLY	399	11.124	59.263	95.047	1.00
	32.81								
35	ATOM	1628	C	GLY	399	11.992	58.359	94.192	1.00
	31.38								
	ATOM	1629	O	GLY	399	13.204	58.293	94.413	1.00
40	31.87								
	ATOM	1630	N	ALA	400	11.390	57.672	93.227	1.00
	28.96								
45	ATOM	1632	CA	ALA	400	12.137	56.790	92.344	1.00
	27.32								
	ATOM	1633	CB	ALA	400	11.174	56.056	91.394	1.00
50	26.93								
	ATOM	1634	C	ALA	400	13.176	57.556	91.544	1.00
	25.78								
55	ATOM	1635	O	ALA	400	12.899	58.602	90.986	1.00
	26.61								
	ATOM	1636	N	ALA	401	14.402	57.059	91.524	1.00
60	25.56								
	ATOM	1638	CA	ALA	401	15.449	57.735	90.786	1.00
	24.04								
65	ATOM	1639	CB	ALA	401	16.606	58.096	91.755	1.00
	23.91								
	ATOM	1640	C	ALA	401	15.933	56.851	89.634	1.00
70	23.70								
	ATOM	1641	O	ALA	401	15.934	55.619	89.771	1.00
	24.65								
75	ATOM	1642	N	PHE	402	16.272	57.449	88.495	1.00
	21.51								
	ATOM	1644	CA	PHE	402	16.758	56.704	87.299	1.00
80	20.26								
	ATOM	1645	CB	PHE	402	15.642	56.605	86.236	1.00
	19.45								
85	ATOM	1646	CG	PHE	402	14.362	56.003	86.750	1.00
	19.99								
	ATOM	1647	CD1	PHE	402	13.375	56.818	87.331	1.00
90	18.30								
	ATOM	1648	CD2	PHE	402	14.174	54.624	86.739	1.00
	17.24								
95	ATOM	1649	CE1	PHE	402	12.214	56.264	87.885	1.00
	18.60								
	ATOM	1650	CE2	PHE	402	13.016	54.065	87.296	1.00
	18.88								

	ATOM	1651	CZ	PHE	402	12.035	54.890	87.881	1.00
	17.36								
	ATOM	1652	C	PHE	402	17.992	57.390	86.685	1.00
	19.72								
5	ATOM	1653	O	PHE	402	18.205	58.604	86.908	1.00
	19.51								
	ATOM	1654	N	PRO	403	18.841	56.633	85.948	1.00
	17.61								
10	ATOM	1655	CD	PRO	403	18.654	55.224	85.565	1.00
	17.37								
	ATOM	1656	CA	PRO	403	20.063	57.183	85.321	1.00
	15.21								
	ATOM	1657	CB	PRO	403	20.615	55.998	84.521	1.00
	14.52								
15	ATOM	1658	CG	PRO	403	20.064	54.794	85.246	1.00
	16.35								
	ATOM	1659	C	PRO	403	19.614	58.268	84.390	1.00
	14.03								
	ATOM	1660	O	PRO	403	18.940	57.991	83.393	1.00
	12.56								
20	ATOM	1661	N	ILE	404	19.955	59.506	84.727	1.00
	10.55								
	ATOM	1663	CA	ILE	404	19.548	60.642	83.932	1.00
	9.23								
25	ATOM	1664	CB	ILE	404	20.103	61.969	84.556	1.00
	8.33								
	ATOM	1665	CG2	ILE	404	19.856	63.198	83.614	1.00
	7.22								
	ATOM	1666	CG1	ILE	404	19.428	62.279	85.898	1.00
	10.89								
30	ATOM	1667	CD1	ILE	404	18.045	62.761	85.740	1.00
	15.61								
	ATOM	1668	C	ILE	404	19.958	60.551	82.463	1.00
	9.05								
35	ATOM	1669	O	ILE	404	19.168	60.830	81.581	1.00
	10.29								
	ATOM	1670	N	LYS	405	21.218	60.216	82.199	1.00
	7.51								
	ATOM	1672	CA	LYS	405	21.697	60.166	80.805	1.00
	7.74								
40	ATOM	1673	CB	LYS	405	23.199	59.976	80.757	1.00
	7.91								
	ATOM	1674	CG	LYS	405	24.009	61.154	81.381	1.00
	9.19								
45	ATOM	1675	CD	LYS	405	25.544	60.934	81.284	1.00
	12.01								
	ATOM	1676	CE	LYS	405	26.376	62.219	81.618	1.00
	13.50								
	ATOM	1677	NZ	LYS	405	27.864	62.237	81.067	1.00
	14.45								
50	ATOM	1681	C	LYS	405	20.997	59.190	79.840	1.00
	7.52								
	ATOM	1682	O	LYS	405	20.987	59.451	78.641	1.00
	5.32								
55	ATOM	1683	N	TRP	406	20.325	58.163	80.367	1.00
	7.25								
	ATOM	1685	CA	TRP	406	19.631	57.158	79.533	1.00
	10.21								

	ATOM 8.91	1686	CB	TRP	406	19.925	55.740	80.065	1.00
	ATOM 10.41	1687	CG	TRP	406	21.236	55.217	79.637	1.00
5	ATOM 8.35	1688	CD2	TRP	406	22.496	55.427	80.271	1.00
	ATOM 9.11	1689	CE2	TRP	406	23.476	54.814	79.452	1.00
10	ATOM 7.48	1690	CE3	TRP	406	22.905	56.078	81.433	1.00
	ATOM 10.63	1691	CD1	TRP	406	21.484	54.492	78.508	1.00
	ATOM 9.36	1692	NE1	TRP	406	22.822	54.251	78.391	1.00
15	ATOM 8.58	1694	CZ2	TRP	406	24.831	54.821	79.776	1.00
	ATOM 9.59	1695	CZ3	TRP	406	24.260	56.094	81.756	1.00
20	ATOM 8.77	1696	CH2	TRP	406	25.210	55.475	80.918	1.00
	ATOM 11.44	1697	C	TRP	406	18.106	57.292	79.568	1.00
	ATOM 12.49	1698	O	TRP	406	17.387	56.668	78.809	1.00
25	ATOM 11.51	1699	N	THR	407	17.617	58.073	80.511	1.00
	ATOM 12.67	1701	CA	THR	407	16.181	58.167	80.689	1.00
30	ATOM 12.98	1702	CB	THR	407	15.816	58.202	82.219	1.00
	ATOM 12.38	1703	OG1	THR	407	16.463	57.099	82.887	1.00
	ATOM 12.55	1705	CG2	THR	407	14.310	58.062	82.403	1.00
35	ATOM 12.08	1706	C	THR	407	15.504	59.303	79.948	1.00
	ATOM 11.81	1707	O	THR	407	16.003	60.425	79.927	1.00
40	ATOM 11.28	1708	N	ALA	408	14.300	59.017	79.445	1.00
	ATOM 10.42	1710	CA	ALA	408	13.510	59.970	78.686	1.00
	ATOM 8.62	1711	CB	ALA	408	12.267	59.252	78.095	1.00
45	ATOM 10.45	1712	C	ALA	408	13.090	61.129	79.566	1.00
	ATOM 10.17	1713	O	ALA	408	12.737	60.925	80.724	1.00
50	ATOM 12.06	1714	N	PRO	409	13.067	62.356	79.035	1.00
	ATOM 10.84	1715	CD	PRO	409	13.188	62.730	77.611	1.00
	ATOM 12.48	1716	CA	PRO	409	12.681	63.524	79.862	1.00
55	ATOM 10.99	1717	CB	PRO	409	12.645	64.690	78.844	1.00
	ATOM 9.44	1718	CG	PRO	409	13.517	64.202	77.667	1.00

	ATOM	1719	C	PRO	409	11.341	63.395	80.598	1.00
	13.51								
	ATOM	1720	O	PRO	409	11.274	63.733	81.780	1.00
	13.39								
5	ATOM	1721	N	GLU	410	10.309	62.825	79.950	1.00
	13.66								
	ATOM	1723	CA	GLU	410	9.008	62.686	80.601	1.00
	14.05								
10	ATOM	1724	CB	GLU	410	7.929	62.164	79.618	1.00
	14.74								
	ATOM	1725	CG	GLU	410	8.157	60.712	79.139	1.00
	14.11								
	ATOM	1726	CD	GLU	410	9.006	60.589	77.855	1.00
	13.92								
15	ATOM	1727	OE1	GLU	410	9.609	61.586	77.412	1.00
	17.79								
	ATOM	1728	OE2	GLU	410	9.055	59.487	77.268	1.00
	10.94								
	ATOM	1729	C	GLU	410	9.096	61.754	81.789	1.00
20	15.51								
	ATOM	1730	O	GLU	410	8.327	61.851	82.762	1.00
	15.28								
	ATOM	1731	N	ALA	411	10.070	60.839	81.740	1.00
	13.77								
25	ATOM	1733	CA	ALA	411	10.273	59.891	82.842	1.00
	13.86								
	ATOM	1734	CB	ALA	411	10.993	58.635	82.349	1.00
	11.70								
	ATOM	1735	C	ALA	411	11.038	60.542	83.979	1.00
30	15.69								
	ATOM	1736	O	ALA	411	10.800	60.260	85.160	1.00
	16.64								
	ATOM	1737	N	ILE	412	12.015	61.375	83.623	1.00
	17.12								
35	ATOM	1739	CA	ILE	412	12.777	62.111	84.637	1.00
	17.37								
	ATOM	1740	CB	ILE	412	13.973	62.899	83.992	1.00
	17.17								
	ATOM	1741	CG2	ILE	412	14.591	63.878	84.984	1.00
40	15.66								
	ATOM	1742	CG1	ILE	412	15.060	61.930	83.462	1.00
	17.50								
	ATOM	1743	CD1	ILE	412	16.132	62.644	82.494	1.00
	17.00								
45	ATOM	1744	C	ILE	412	11.843	63.117	85.337	1.00
	19.20								
	ATOM	1745	O	ILE	412	11.727	63.116	86.550	1.00
	20.37								
	ATOM	1746	N	ASN	413	11.091	63.865	84.522	1.00
50	19.09								
	ATOM	1748	CA	ASN	413	10.193	64.901	84.980	1.00
	22.25								
	ATOM	1749	CB	ASN	413	9.782	65.838	83.812	1.00
	20.96								
55	ATOM	1750	CG	ASN	413	10.949	66.645	83.252	1.00
	23.09								
	ATOM	1751	OD1	ASN	413	11.885	66.995	83.973	1.00
	24.79								

	ATOM	1752	ND2	ASN	413	10.902	66.945	81.961	1.00
	24.01								
	ATOM	1755	C	ASN	413	8.921	64.436	85.696	1.00
	22.36								
5	ATOM	1756	O	ASN	413	8.634	64.894	86.796	1.00
	25.00								
	ATOM	1757	N	TYR	414	8.177	63.525	85.073	1.00
	24.57								
10	ATOM	1759	CA	TYR	414	6.898	63.071	85.616	1.00
	24.50								
	ATOM	1760	CB	TYR	414	5.790	63.345	84.593	1.00
	24.84								
	ATOM	1761	CG	TYR	414	5.842	64.728	83.981	1.00
	26.70								
15	ATOM	1762	CD1	TYR	414	5.987	65.875	84.772	1.00
	28.30								
	ATOM	1763	CE1	TYR	414	6.144	67.142	84.198	1.00
	27.43								
20	ATOM	1764	CD2	TYR	414	5.821	64.896	82.605	1.00
	29.06								
	ATOM	1765	CE2	TYR	414	5.979	66.157	82.025	1.00
	29.86								
	ATOM	1766	CZ	TYR	414	6.131	67.273	82.833	1.00
	30.46								
25	ATOM	1767	OH	TYR	414	6.329	68.528	82.252	1.00
	32.92								
	ATOM	1769	C	TYR	414	6.825	61.638	86.113	1.00
	23.44								
30	ATOM	1770	O	TYR	414	5.803	61.207	86.625	1.00
	25.42								
	ATOM	1771	N	GLY	415	7.928	60.899	86.015	1.00
	22.95								
	ATOM	1773	CA	GLY	415	7.922	59.520	86.467	1.00
	21.12								
35	ATOM	1774	C	GLY	415	7.123	58.621	85.520	1.00
	18.78								
	ATOM	1775	O	GLY	415	6.916	57.437	85.802	1.00
	18.47								
40	ATOM	1776	N	THR	416	6.722	59.172	84.383	1.00
	18.49								
	ATOM	1778	CA	THR	416	5.939	58.434	83.396	1.00
	18.76								
	ATOM	1779	CB	THR	416	4.974	59.380	82.694	1.00
	19.70								
45	ATOM	1780	OG1	THR	416	5.715	60.494	82.206	1.00
	25.21								
	ATOM	1782	CG2	THR	416	3.918	59.920	83.703	1.00
	23.33								
	ATOM	1783	C	THR	416	6.793	57.704	82.348	1.00
50	15.58								
	ATOM	1784	O	THR	416	7.590	58.312	81.606	1.00
	15.63								
	ATOM	1785	N	PHE	417	6.559	56.397	82.263	1.00
	14.22								
55	ATOM	1787	CA	PHE	417	7.250	55.502	81.344	1.00
	12.90								
	ATOM	1788	CB	PHE	417	7.911	54.364	82.118	1.00
	12.43								



5	ATOM 13.25	1789	CG	PHE	417	9.134	54.763	82.853	1.00
	ATOM 12.35	1790	CD1	PHE	417	9.057	55.226	84.174	1.00
	ATOM 13.08	1791	CD2	PHE	417	10.383	54.601	82.258	1.00
	ATOM 14.79	1792	CE1	PHE	417	10.217	55.598	84.848	1.00
	ATOM 13.12	1793	CE2	PHE	417	11.526	54.969	82.916	1.00
10	ATOM 14.79	1794	CZ	PHE	417	11.449	55.437	84.228	1.00
	ATOM 12.95	1795	C	PHE	417	6.304	54.829	80.382	1.00
	ATOM 11.58	1796	O	PHE	417	5.224	54.345	80.793	1.00
15	ATOM 9.37	1797	N	THR	418	6.686	54.787	79.118	1.00
	ATOM 9.20	1799	CA	THR	418	5.913	54.095	78.072	1.00
	ATOM 11.14	1800	CB	THR	418	5.073	55.056	77.147	1.00
	ATOM 12.07	1801	OG1	THR	418	5.959	55.769	76.311	1.00
20	ATOM 12.81	1803	CG2	THR	418	4.246	56.057	77.952	1.00
	ATOM 6.81	1804	C	THR	418	6.951	53.449	77.191	1.00
	ATOM 8.90	1805	O	THR	418	8.154	53.657	77.387	1.00
25	ATOM 6.90	1806	N	ILE	419	6.542	52.686	76.204	1.00
	ATOM 6.26	1808	CA	ILE	419	7.520	52.054	75.319	1.00
	ATOM 6.92	1809	CB	ILE	419	6.799	51.100	74.313	1.00
30	ATOM 8.94	1810	CG2	ILE	419	6.000	51.927	73.287	1.00
	ATOM 5.41	1811	CG1	ILE	419	7.798	50.165	73.599	1.00
	ATOM 6.59	1812	CD1	ILE	419	8.540	49.171	74.529	1.00
35	ATOM 8.26	1813	C	ILE	419	8.350	53.143	74.577	1.00
	ATOM 5.34	1814	O	ILE	419	9.488	52.908	74.138	1.00
	ATOM 6.34	1815	N	LYS	420	7.806	54.364	74.521	1.00
40	ATOM 4.08	1817	CA	LYS	420	8.520	55.484	73.854	1.00
	ATOM 2.68	1818	CB	LYS	420	7.551	56.644	73.531	1.00
	ATOM 3.67	1819	CG	LYS	420	6.438	56.270	72.514	1.00
45	ATOM 5.03	1820	CD	LYS	420	6.999	55.671	71.209	1.00
	ATOM 6.23	1821	CE	LYS	420	5.953	55.772	70.043	1.00

	ATOM 7.07	1822	NZ	LYS	420	6.424	54.981	68.875	1.00
	ATOM 4.79	1826	C	LYS	420	9.676	55.986	74.697	1.00
5	ATOM 6.52	1827	O	LYS	420	10.576	56.650	74.186	1.00
	ATOM 4.97	1828	N	SER	421	9.629	55.723	76.004	0.84
10	ATOM 3.95	1830	CA	SER	421	10.729	56.084	76.893	0.84
	ATOM 5.49	1831	CB	SER	421	10.352	55.960	78.402	0.84
	ATOM 10.14	1832	OG	SER	421	9.094	56.468	78.668	0.84
15	ATOM 3.16	1834	C	SER	421	11.856	55.117	76.617	0.84
	ATOM 2.00	1835	O	SER	421	13.021	55.456	76.709	0.84
20	ATOM 4.50	1836	N	ASP	422	11.490	53.857	76.377	1.00
	ATOM 5.52	1838	CA	ASP	422	12.512	52.860	76.032	1.00
	ATOM 6.76	1839	CB	ASP	422	11.915	51.447	75.914	1.00
25	ATOM 9.09	1840	CG	ASP	422	11.665	50.773	77.266	1.00
	ATOM 4.99	1841	OD1	ASP	422	12.156	51.243	78.339	1.00
30	ATOM 9.59	1842	OD2	ASP	422	10.963	49.730	77.229	1.00
	ATOM 3.86	1843	C	ASP	422	13.142	53.267	74.694	1.00
	ATOM 2.91	1844	O	ASP	422	14.361	53.122	74.463	1.00
35	ATOM 4.15	1845	N	VAL	423	12.304	53.759	73.783	1.00
	ATOM 4.40	1847	CA	VAL	423	12.848	54.225	72.504	1.00
40	ATOM 5.29	1848	CB	VAL	423	11.735	54.766	71.550	1.00
	ATOM 5.10	1849	CG1	VAL	423	12.373	55.463	70.292	1.00
	ATOM 4.81	1850	CG2	VAL	423	10.844	53.619	71.040	1.00
45	ATOM 3.42	1851	C	VAL	423	13.944	55.267	72.711	1.00
	ATOM 3.11	1852	O	VAL	423	15.025	55.180	72.099	1.00
50	ATOM 4.34	1853	N	TRP	424	13.687	56.245	73.583	1.00
	ATOM 3.74	1855	CA	TRP	424	14.703	57.278	73.898	1.00
	ATOM 3.96	1856	CB	TRP	424	14.186	58.216	75.004	1.00
55	ATOM 4.52	1857	CG	TRP	424	15.148	59.270	75.367	1.00
	ATOM 4.48	1858	CD2	TRP	424	15.071	60.663	75.021	1.00

5	ATOM	1859	CE2	TRP	424	16.218	61.297	75.562	1.00
	5.86								
	ATOM	1860	CE3	TRP	424	14.137	61.450	74.307	1.00
	6.03								
10	ATOM	1861	CD1	TRP	424	16.312	59.108	76.079	1.00
	4.73								
	ATOM	1862	NE1	TRP	424	16.952	60.329	76.206	1.00
	2.83								
15	ATOM	1864	CZ2	TRP	424	16.470	62.682	75.422	1.00
	5.37								
	ATOM	1865	CZ3	TRP	424	14.387	62.856	74.166	1.00
	6.25								
20	ATOM	1866	CH2	TRP	424	15.546	63.436	74.725	1.00
	3.32								
	ATOM	1867	C	TRP	424	16.007	56.611	74.391	1.00
	5.05								
25	ATOM	1868	O	TRP	424	17.113	56.965	73.917	1.00
	6.14								
	ATOM	1869	N	SER	425	15.858	55.672	75.338	0.74
	2.00								
30	ATOM	1871	CA	SER	425	16.988	54.915	75.894	0.74
	2.00								
	ATOM	1872	CB	SER	425	16.515	53.928	76.981	0.74
	2.95								
35	ATOM	1873	OG	SER	425	15.796	54.605	78.015	0.74
	2.82								
	ATOM	1875	C	SER	425	17.764	54.161	74.834	0.74
	2.00								
40	ATOM	1876	O	SER	425	18.976	54.040	74.889	0.74
	2.00								
	ATOM	1877	N	PHE	426	17.038	53.644	73.857	1.00
	2.05								
45	ATOM	1879	CA	PHE	426	17.702	52.933	72.729	1.00
	2.00								
	ATOM	1880	CB	PHE	426	16.643	52.335	71.789	1.00
	2.00								
50	ATOM	1881	CG	PHE	426	17.235	51.508	70.669	1.00
	3.82								
	ATOM	1882	CD1	PHE	426	17.777	50.261	70.941	1.00
	3.04								
55	ATOM	1883	CD2	PHE	426	17.279	51.995	69.371	1.00
	4.66								
	ATOM	1884	CE1	PHE	426	18.346	49.516	69.918	1.00
	5.20								
55	ATOM	1885	CE2	PHE	426	17.845	51.248	68.359	1.00
	5.66								
	ATOM	1886	CZ	PHE	426	18.386	50.010	68.650	1.00
	5.23								
55	ATOM	1887	C	PHE	426	18.615	53.883	71.944	1.00
	2.84								
	ATOM	1888	O	PHE	426	19.761	53.550	71.593	1.00
	2.64								
55	ATOM	1889	N	GLY	427	18.148	55.108	71.716	1.00
	2.95								
	ATOM	1891	CA	GLY	427	19.003	56.051	70.984	1.00
	2.56								
	ATOM	1892	C	GLY	427	20.309	56.268	71.740	1.00
	3.41								

	ATOM	1893	O	GLY	427	21.375	56.316	71.143	1.00
	5.01								
	ATOM	1894	N	ILE	428	20.218	56.398	73.062	1.00
	2.32								
5	ATOM	1896	CA	ILE	428	21.404	56.562	73.886	1.00
	2.51								
	ATOM	1897	CB	ILE	428	21.044	56.798	75.385	1.00
	2.00								
10	ATOM	1898	CG2	ILE	428	22.348	56.986	76.232	1.00
	4.15								
	ATOM	1899	CG1	ILE	428	20.075	58.015	75.551	1.00
	3.53								
	ATOM	1900	CD1	ILE	428	20.655	59.343	75.055	1.00
	3.34								
15	ATOM	1901	C	ILE	428	22.255	55.299	73.798	1.00
	3.22								
	ATOM	1902	O	ILE	428	23.488	55.352	73.695	1.00
	2.00								
20	ATOM	1903	N	LEU	429	21.588	54.146	73.849	1.00
	5.03								
	ATOM	1905	CA	LEU	429	22.300	52.873	73.737	1.00
	4.88								
	ATOM	1906	CB	LEU	429	21.303	51.682	73.883	1.00
	5.84								
25	ATOM	1907	CG	LEU	429	21.893	50.289	74.195	1.00
	8.89								
	ATOM	1908	CD1	LEU	429	20.796	49.309	74.701	1.00
	5.51								
30	ATOM	1909	CD2	LEU	429	22.507	49.742	72.917	1.00
	10.48								
	ATOM	1910	C	LEU	429	23.134	52.812	72.436	1.00
	3.30								
	ATOM	1911	O	LEU	429	24.248	52.361	72.435	1.00
	3.13								
35	ATOM	1912	N	LEU	430	22.571	53.297	71.326	1.00
	4.74								
	ATOM	1914	CA	LEU	430	23.271	53.350	70.055	1.00
	5.38								
40	ATOM	1915	CB	LEU	430	22.407	53.988	68.973	1.00
	4.05								
	ATOM	1916	CG	LEU	430	21.146	53.206	68.574	1.00
	4.57								
	ATOM	1917	CD1	LEU	430	20.360	54.072	67.628	1.00
	5.38								
45	ATOM	1918	CD2	LEU	430	21.476	51.819	67.911	1.00
	5.08								
	ATOM	1919	C	LEU	430	24.592	54.116	70.130	1.00
	3.87								
50	ATOM	1920	O	LEU	430	25.534	53.745	69.411	1.00
	4.14								
	ATOM	1921	N	THR	431	24.627	55.186	70.943	1.00
	3.19								
	ATOM	1923	CA	THR	431	25.866	55.948	71.123	1.00
	4.13								
55	ATOM	1924	CB	THR	431	25.674	57.329	71.881	1.00
	6.10								
	ATOM	1925	OG1	THR	431	25.431	57.085	73.283	1.00
	4.45								

5	ATOM 3.43	1927	CG2	THR	431	24.482	58.149	71.271	1.00
	ATOM 5.42	1928	C	THR	431	26.864	55.068	71.868	1.00
	ATOM 5.41	1929	O	THR	431	28.063	55.066	71.547	1.00
10	ATOM 5.58	1930	N	GLU	432	26.376	54.264	72.816	1.00
	ATOM 5.91	1932	CA	GLU	432	27.294	53.343	73.514	1.00
	ATOM 4.77	1933	CB	GLU	432	26.601	52.587	74.663	1.00
15	ATOM 6.02	1934	CG	GLU	432	26.024	53.501	75.738	1.00
	ATOM 8.30	1935	CD	GLU	432	25.312	52.690	76.824	1.00
	ATOM 7.55	1936	OE1	GLU	432	24.124	52.346	76.656	1.00
20	ATOM 8.54	1937	OE2	GLU	432	25.984	52.327	77.812	1.00
	ATOM 4.75	1938	C	GLU	432	27.876	52.314	72.562	1.00
	ATOM 7.57	1939	O	GLU	432	29.063	51.880	72.721	1.00
25	ATOM 4.02	1940	N	ILE	433	27.067	51.895	71.580	1.00
	ATOM 5.75	1942	CA	ILE	433	27.573	50.891	70.640	1.00
	ATOM 5.46	1943	CB	ILE	433	26.434	50.278	69.789	1.00
30	ATOM 7.63	1944	CG2	ILE	433	27.002	49.491	68.557	1.00
	ATOM 3.44	1945	CG1	ILE	433	25.621	49.330	70.667	1.00
	ATOM 3.43	1946	CD1	ILE	433	24.268	48.956	70.064	1.00
35	ATOM 7.58	1947	C	ILE	433	28.662	51.466	69.766	1.00
	ATOM 5.81	1948	O	ILE	433	29.785	50.959	69.716	1.00
	ATOM 8.45	1949	N	VAL	434	28.379	52.645	69.211	1.00
40	ATOM 10.29	1951	CA	VAL	434	29.334	53.291	68.302	1.00
	ATOM 12.33	1952	CB	VAL	434	28.574	54.316	67.398	1.00
	ATOM 10.36	1953	CG1	VAL	434	28.572	55.699	68.013	1.00
45	ATOM 15.29	1954	CG2	VAL	434	29.127	54.289	65.987	1.00
	ATOM 10.86	1955	C	VAL	434	30.619	53.833	68.958	1.00
	ATOM 11.27	1956	O	VAL	434	31.671	53.905	68.328	1.00
50	ATOM 9.46	1957	N	THR	435	30.578	54.184	70.235	1.00
	ATOM 10.41	1959	CA	THR	435	31.790	54.635	70.917	1.00

5	ATOM 9.86	1960	CB	THR	435	31.459	55.722	71.927	1.00
	ATOM 10.21	1961	OG1	THR	435	30.628	55.153	72.922	1.00
	ATOM 5.06	1963	CG2	THR	435	30.747	56.926	71.238	1.00
10	ATOM 11.33	1964	C	THR	435	32.500	53.497	71.701	1.00
	ATOM 9.52	1965	O	THR	435	33.333	53.724	72.552	1.00
	ATOM 10.76	1966	N	HIS	436	32.095	52.255	71.426	1.00
15	ATOM 12.16	1968	CA	HIS	436	32.660	51.108	72.117	1.00
	ATOM 14.36	1969	CB	HIS	436	34.092	50.771	71.622	1.00
	ATOM 17.82	1970	CG	HIS	436	34.138	50.340	70.189	1.00
20	ATOM 18.01	1971	CD2	HIS	436	34.040	51.008	69.028	1.00
	ATOM 17.95	1972	ND1	HIS	436	34.278	48.984	69.811	1.00
	ATOM 16.78	1974	CE1	HIS	436	34.249	48.894	68.515	1.00
25	ATOM 18.47	1975	NE2	HIS	436	34.107	50.118	67.985	1.00
	ATOM 10.66	1977	C	HIS	436	32.574	51.200	73.612	1.00
	ATOM 12.29	1978	O	HIS	436	33.544	51.002	74.345	1.00
30	ATOM 8.50	1979	N	GLY	437	31.402	51.596	74.071	1.00
	ATOM 9.22	1981	CA	GLY	437	31.165	51.663	75.495	1.00
	ATOM 8.30	1982	C	GLY	437	31.423	52.924	76.259	1.00
35	ATOM 10.50	1983	O	GLY	437	31.442	52.845	77.479	1.00
	ATOM 4.33	1984	N	ARG	438	31.604	54.072	75.605	0.58
	ATOM 5.30	1986	CA	ARG	438	31.826	55.340	76.342	0.58
40	ATOM 5.27	1987	CB	ARG	438	32.316	56.432	75.375	0.58
	ATOM 10.45	1988	CG	ARG	438	32.741	57.754	76.040	0.58
	ATOM 12.08	1989	CD	ARG	438	33.316	58.745	75.006	0.58
45	ATOM 14.66	1990	NE	ARG	438	34.065	59.847	75.639	0.58
	ATOM 14.73	1992	CZ	ARG	438	34.540	60.895	74.970	0.58
	ATOM 16.77	1993	NH1	ARG	438	34.337	60.986	73.670	0.58
50	ATOM 15.37	1996	NH2	ARG	438	35.231	61.844	75.583	0.58
	ATOM 3.96	1999	C	ARG	438	30.553	55.845	77.024	0.58

5	ATOM 2.00	2000	O	ARG	438	29.458	55.559	76.577	0.58
	ATOM 7.07	2001	N	ILE	439	30.708	56.622	78.091	1.00
	ATOM 4.89	2003	CA	ILE	439	29.595	57.199	78.814	1.00
	ATOM 10.20	2004	CB	ILE	439	30.048	57.865	80.184	1.00
	ATOM 8.12	2005	CG2	ILE	439	28.834	58.496	80.938	1.00
10	ATOM 12.62	2006	CG1	ILE	439	30.556	56.790	81.179	1.00
	ATOM 13.55	2007	CD1	ILE	439	31.474	57.384	82.326	1.00
	ATOM 4.63	2008	C	ILE	439	28.975	58.227	77.894	1.00
20	ATOM 5.97	2009	O	ILE	439	29.710	58.973	77.199	1.00
	ATOM 2.00	2010	N	PRO	440	27.646	58.251	77.788	0.43
	ATOM 2.00	2011	CD	PRO	440	26.726	57.301	78.423	0.43
	ATOM 2.00	2012	CA	PRO	440	26.959	59.219	76.917	0.43
25	ATOM 2.00	2013	CB	PRO	440	25.487	58.794	77.006	0.43
	ATOM 2.00	2014	CG	PRO	440	25.386	57.918	78.191	0.43
	ATOM 2.00	2015	C	PRO	440	27.155	60.671	77.359	0.43
30	ATOM 2.00	2016	O	PRO	440	27.480	60.906	78.521	0.43
	ATOM 4.34	2017	N	TYR	441	26.950	61.622	76.415	1.00
	ATOM 5.14	2019	CA	TYR	441	27.095	63.053	76.690	1.00
35	ATOM 3.68	2020	CB	TYR	441	26.031	63.549	77.709	1.00
	ATOM 4.65	2021	CG	TYR	441	24.582	63.337	77.265	1.00
	ATOM 3.69	2022	CD1	TYR	441	24.002	64.215	76.326	1.00
40	ATOM 4.62	2023	CE1	TYR	441	22.697	64.058	75.898	1.00
	ATOM 4.82	2024	CD2	TYR	441	23.804	62.283	77.756	1.00
	ATOM 3.03	2025	CE2	TYR	441	22.478	62.117	77.334	1.00
	ATOM 2.94	2026	CZ	TYR	441	21.941	63.015	76.402	1.00
50	ATOM 2.71	2027	OH	TYR	441	20.669	62.919	75.948	1.00
	ATOM 9.44	2029	C	TYR	441	28.467	63.298	77.309	1.00
	ATOM 10.66	2030	O	TYR	441	28.565	63.832	78.399	1.00
55	ATOM 11.17	2031	N	PRO	442	29.540	62.948	76.597	1.00

5	ATOM 12.12	2032	CD	PRO	442	29.574	62.539	75.175	1.00
	ATOM 12.86	2033	CA	PRO	442	30.906	63.125	77.120	1.00
	ATOM 13.07	2034	CB	PRO	442	31.783	62.839	75.897	1.00
	ATOM 11.80	2035	CG	PRO	442	30.897	61.871	75.065	1.00
10	ATOM 11.90	2036	C	PRO	442	31.234	64.500	77.708	1.00
	ATOM 12.98	2037	O	PRO	442	30.916	65.527	77.134	1.00
15	ATOM 13.61	2038	N	GLY	443	31.778	64.492	78.917	1.00
	ATOM 13.89	2040	CA	GLY	443	32.196	65.743	79.530	1.00
	ATOM 13.55	2041	C	GLY	443	31.127	66.578	80.150	1.00
20	ATOM 13.44	2042	O	GLY	443	31.388	67.706	80.537	1.00
	ATOM 11.91	2043	N	MET	444	29.914	66.029	80.245	1.00
25	ATOM 10.61	2045	CA	MET	444	28.784	66.748	80.829	1.00
	ATOM 12.90	2046	CB	MET	444	27.659	66.840	79.774	1.00
30	ATOM 10.70	2047	CG	MET	444	28.124	67.442	78.447	1.00
	ATOM 14.53	2048	SD	MET	444	26.904	67.495	77.084	1.00
	ATOM 12.34	2049	CE	MET	444	25.403	68.138	77.901	1.00
35	ATOM 11.01	2050	C	MET	444	28.243	66.060	82.080	1.00
	ATOM 9.30	2051	O	MET	444	28.173	64.826	82.151	1.00
	ATOM 9.72	2052	N	THR	445	27.813	66.864	83.048	1.00
40	ATOM 9.39	2054	CA	THR	445	27.207	66.359	84.241	1.00
	ATOM 12.53	2055	CB	THR	445	27.354	67.395	85.397	1.00
45	ATOM 9.54	2056	OG1	THR	445	26.680	68.625	85.023	1.00
	ATOM 10.72	2058	CG2	THR	445	28.837	67.653	85.703	1.00
	ATOM 9.34	2059	C	THR	445	25.714	66.202	83.969	1.00
50	ATOM 6.96	2060	O	THR	445	25.201	66.651	82.926	1.00
	ATOM 8.17	2061	N	ASN	446	24.991	65.596	84.900	1.00
55	ATOM 10.10	2063	CA	ASN	446	23.549	65.439	84.723	1.00
	ATOM 11.33	2064	CB	ASN	446	22.950	64.647	85.888	1.00
	ATOM 12.27	2065	CG	ASN	446	23.261	63.145	85.810	1.00



	ATOM	2066	OD1	ASN	446	23.738	62.652	84.779	1.00
	13.46								
	ATOM	2067	ND2	ASN	446	22.993	62.421	86.900	1.00
	10.41								
5	ATOM	2070	C	ASN	446	22.821	66.786	84.545	1.00
	10.86								
	ATOM	2071	O	ASN	446	21.933	66.890	83.708	1.00
	10.92								
10	ATOM	2072	N	PRO	447	23.140	67.806	85.381	1.00
	10.33								
	ATOM	2073	CD	PRO	447	23.818	67.712	86.697	1.00
	11.30								
	ATOM	2074	CA	PRO	447	22.481	69.119	85.247	1.00
	10.42								
15	ATOM	2075	CB	PRO	447	23.137	69.936	86.370	1.00
	12.22								
	ATOM	2076	CG	PRO	447	23.247	68.905	87.456	1.00
	12.86								
	ATOM	2077	C	PRO	447	22.742	69.739	83.869	1.00
20	8.80								
	ATOM	2078	O	PRO	447	21.859	70.383	83.293	1.00
	9.82								
	ATOM	2079	N	GLU	448	23.968	69.603	83.363	1.00
	8.54								
25	ATOM	2081	CA	GLU	448	24.300	70.112	82.029	1.00
	8.10								
	ATOM	2082	CB	GLU	448	25.784	69.950	81.719	1.00
	9.79								
	ATOM	2083	CG	GLU	448	26.674	71.007	82.384	1.00
30	13.23								
	ATOM	2084	CD	GLU	448	28.125	70.748	82.148	1.00
	12.90								
	ATOM	2085	OE1	GLU	448	28.746	71.586	81.484	1.00
	16.44								
35	ATOM	2086	OE2	GLU	448	28.656	69.679	82.576	1.00
	14.02								
	ATOM	2087	C	GLU	448	23.501	69.384	80.958	1.00
	7.54								
	ATOM	2088	O	GLU	448	23.021	69.984	79.999	1.00
40	6.85								
	ATOM	2089	N	VAL	449	23.327	68.075	81.151	1.00
	6.85								
	ATOM	2091	CA	VAL	449	22.532	67.273	80.174	1.00
	6.66								
45	ATOM	2092	CB	VAL	449	22.555	65.758	80.561	1.00
	4.93								
	ATOM	2093	CG1	VAL	449	21.562	64.982	79.702	1.00
	9.91								
	ATOM	2094	CG2	VAL	449	23.934	65.187	80.366	1.00
50	5.99								
	ATOM	2095	C	VAL	449	21.078	67.790	80.114	1.00
	5.68								
	ATOM	2096	O	VAL	449	20.548	68.105	79.043	1.00
	4.79								
55	ATOM	2097	N	ILE	450	20.499	68.001	81.292	0.60
	2.00								
	ATOM	2099	CA	ILE	450	19.152	68.541	81.399	0.60
	3.50								

	ATOM	2100	CB	ILE	450	18.737	68.594	82.909	0.60
	4.11								
	ATOM	2101	CG2	ILE	450	17.459	69.395	83.108	0.60
	2.00								
5	ATOM	2102	CG1	ILE	450	18.574	67.171	83.431	0.60
	2.00								
	ATOM	2103	CD1	ILE	450	18.374	67.130	84.893	0.60
	6.46								
10	ATOM	2104	C	ILE	450	19.050	69.938	80.778	0.60
	3.55								
	ATOM	2105	O	ILE	450	18.145	70.230	79.999	0.60
	2.00								
	ATOM	2106	N	GLN	451	20.020	70.787	81.097	1.00
	6.56								
15	ATOM	2108	CA	GLN	451	20.075	72.158	80.571	1.00
	9.94								
	ATOM	2109	CB	GLN	451	21.341	72.877	81.075	1.00
	13.77								
20	ATOM	2110	CG	GLN	451	21.464	73.121	82.565	1.00
	20.58								
	ATOM	2111	CD	GLN	451	22.831	73.739	82.890	1.00
	25.24								
	ATOM	2112	OE1	GLN	451	23.347	74.549	82.087	1.00
	26.69								
25	ATOM	2113	NE2	GLN	451	23.453	73.326	83.996	1.00
	24.98								
	ATOM	2116	C	GLN	451	20.101	72.153	79.034	1.00
	8.45								
30	ATOM	2117	O	GLN	451	19.308	72.814	78.354	1.00
	8.08								
	ATOM	2118	N	ASN	452	20.995	71.335	78.488	1.00
	8.61								
	ATOM	2120	CA	ASN	452	21.107	71.178	77.038	1.00
	9.38								
35	ATOM	2121	CB	ASN	452	22.292	70.283	76.654	1.00
	10.95								
	ATOM	2122	CG	ASN	452	23.612	71.048	76.615	1.00
	13.96								
40	ATOM	2123	OD1	ASN	452	24.486	70.740	75.827	1.00
	18.85								
	ATOM	2124	ND2	ASN	452	23.768	71.995	77.491	1.00
	16.27								
	ATOM	2127	C	ASN	452	19.856	70.626	76.392	1.00
	9.06								
45	ATOM	2128	O	ASN	452	19.417	71.113	75.327	1.00
	8.73								
	ATOM	2129	N	LEU	453	19.287	69.588	76.984	1.00
	8.56								
50	ATOM	2131	CA	LEU	453	18.080	69.022	76.418	1.00
	7.19								
	ATOM	2132	CB	LEU	453	17.612	67.814	77.228	1.00
	7.76								
	ATOM	2133	CG	LEU	453	18.532	66.609	77.142	1.00
	6.00								
55	ATOM	2134	CD1	LEU	453	17.995	65.564	78.071	1.00
	9.63								
	ATOM	2135	CD2	LEU	453	18.615	66.104	75.679	1.00
	6.63								

	ATOM 8.52	2136	C	LEU	453	16.953	70.050	76.352	1.00
	ATOM 9.41	2137	O	LEU	453	16.224	70.124	75.364	1.00
5	ATOM 7.13	2138	N	GLU	454	16.787	70.812	77.437	1.00
	ATOM 9.15	2140	CA	GLU	454	15.724	71.802	77.494	1.00
10	ATOM 10.57	2141	CB	GLU	454	15.458	72.265	78.953	1.00
	ATOM 14.54	2142	CG	GLU	454	14.804	71.090	79.746	1.00
	ATOM 18.39	2143	CD	GLU	454	14.678	71.302	81.259	1.00
15	ATOM 19.85	2144	OE1	GLU	454	15.251	72.277	81.791	1.00
	ATOM 18.65	2145	OE2	GLU	454	14.003	70.466	81.910	1.00
20	ATOM 8.75	2146	C	GLU	454	15.876	72.937	76.516	1.00
	ATOM 9.11	2147	O	GLU	454	14.915	73.603	76.173	1.00
	ATOM 8.42	2148	N	ARG	455	17.102	73.132	76.038	1.00
25	ATOM 9.20	2150	CA	ARG	455	17.381	74.148	75.013	1.00
	ATOM 10.05	2151	CB	ARG	455	18.884	74.503	74.997	1.00
30	ATOM 12.72	2152	CG	ARG	455	19.347	75.201	76.209	1.00
	ATOM 13.32	2153	CD	ARG	455	20.794	75.621	76.012	1.00
	ATOM 12.24	2154	NE	ARG	455	20.862	76.749	75.073	1.00
35	ATOM 11.80	2156	CZ	ARG	455	21.999	77.383	74.764	1.00
	ATOM 6.86	2157	NH1	ARG	455	23.161	76.974	75.279	1.00
40	ATOM 7.34	2160	NH2	ARG	455	21.932	78.547	74.123	1.00
	ATOM 9.77	2163	C	ARG	455	17.062	73.632	73.619	1.00
	ATOM 9.32	2164	O	ARG	455	17.047	74.409	72.682	1.00
45	ATOM 8.29	2165	N	GLY	456	16.814	72.318	73.483	1.00
	ATOM 7.45	2167	CA	GLY	456	16.551	71.743	72.161	1.00
50	ATOM 5.78	2168	C	GLY	456	17.785	70.997	71.638	1.00
	ATOM 4.51	2169	O	GLY	456	17.776	70.442	70.546	1.00
	ATOM 5.91	2170	N	TYR	457	18.884	71.066	72.356	1.00
55	ATOM 5.76	2172	CA	TYR	457	20.077	70.333	71.918	1.00
	ATOM 5.55	2173	CB	TYR	457	21.320	70.786	72.695	1.00

	ATOM 4.70	2174	CG	TYR	457	21.816	72.215	72.470	1.00
	ATOM 4.74	2175	CD1	TYR	457	21.368	72.999	71.395	1.00
5	ATOM 5.80	2176	CE1	TYR	457	21.910	74.291	71.166	1.00
	ATOM 9.15	2177	CD2	TYR	457	22.798	72.744	73.300	1.00
10	ATOM 7.40	2178	CE2	TYR	457	23.348	73.999	73.075	1.00
	ATOM 6.58	2179	CZ	TYR	457	22.905	74.770	72.012	1.00
	ATOM 6.87	2180	OH	TYR	457	23.498	76.015	71.849	1.00
15	ATOM 5.84	2182	C	TYR	457	19.914	68.838	72.234	1.00
	ATOM 2.95	2183	O	TYR	457	19.059	68.474	73.058	1.00
20	ATOM 7.21	2184	N	ARG	458	20.689	67.996	71.542	1.00
	ATOM 5.55	2186	CA	ARG	458	20.741	66.581	71.849	1.00
	ATOM 5.01	2187	CB	ARG	458	20.055	65.757	70.738	1.00
25	ATOM 3.95	2188	CG	ARG	458	18.511	65.956	70.669	1.00
	ATOM 4.69	2189	CD	ARG	458	17.803	65.576	71.993	1.00
30	ATOM 4.48	2190	NE	ARG	458	16.318	65.689	71.959	1.00
	ATOM 8.02	2192	CZ	ARG	458	15.581	66.711	72.411	1.00
	ATOM 9.83	2193	NH1	ARG	458	16.148	67.790	72.966	1.00
35	ATOM 6.51	2196	NH2	ARG	458	14.256	66.681	72.293	1.00
	ATOM 6.38	2199	C	ARG	458	22.222	66.237	71.976	1.00
40	ATOM 5.47	2200	O	ARG	458	23.090	67.126	71.790	1.00
	ATOM 3.53	2201	N	MET	459	22.557	64.988	72.283	1.00
	ATOM 4.64	2203	CA	MET	459	23.989	64.633	72.379	1.00
45	ATOM 4.43	2204	CB	MET	459	24.168	63.117	72.616	1.00
	ATOM 5.73	2205	CG	MET	459	25.529	62.769	73.161	1.00
50	ATOM 8.91	2206	SD	MET	459	25.675	60.947	73.371	1.00
	ATOM 8.80	2207	CE	MET	459	24.195	60.627	74.333	1.00
	ATOM 4.68	2208	C	MET	459	24.762	64.997	71.127	1.00
55	ATOM 4.18	2209	O	MET	459	24.285	64.806	70.001	1.00
	ATOM 3.91	2210	N	VAL	460	25.947	65.555	71.326	1.00

	ATOM 6.53	2212	CA	VAL	460	26.849	65.922	70.239	1.00
	ATOM 7.54	2213	CB	VAL	460	28.194	66.479	70.848	1.00
5	ATOM 8.61	2214	CG1	VAL	460	29.230	66.668	69.784	1.00
	ATOM 7.16	2215	CG2	VAL	460	27.953	67.745	71.699	1.00
10	ATOM 6.37	2216	C	VAL	460	27.220	64.635	69.425	1.00
	ATOM 6.28	2217	O	VAL	460	27.348	63.597	69.993	1.00
	ATOM 5.72	2218	N	ARG	461	27.293	64.705	68.089	1.00
15	ATOM 8.25	2220	CA	ARG	461	27.713	63.538	67.294	1.00
	ATOM 8.12	2221	CB	ARG	461	28.107	63.962	65.877	1.00
20	ATOM 7.53	2222	CG	ARG	461	26.973	64.465	65.084	1.00
	ATOM 10.16	2223	CD	ARG	461	27.462	65.018	63.756	1.00
	ATOM 7.37	2224	NE	ARG	461	26.283	65.256	62.928	1.00
25	ATOM 8.20	2226	CZ	ARG	461	25.641	66.421	62.865	1.00
	ATOM 7.00	2227	NH1	ARG	461	26.053	67.488	63.601	1.00
30	ATOM 3.52	2230	NH2	ARG	461	24.632	66.538	62.011	1.00
	ATOM 9.83	2233	C	ARG	461	28.937	62.826	67.834	1.00
	ATOM 8.35	2234	O	ARG	461	29.988	63.453	68.008	1.00
35	ATOM 10.04	2235	N	PRO	462	28.823	61.513	68.167	1.00
	ATOM 8.96	2236	CD	PRO	462	27.623	60.680	68.322	1.00
40	ATOM 11.37	2237	CA	PRO	462	30.016	60.825	68.694	1.00
	ATOM 7.39	2238	CB	PRO	462	29.494	59.402	69.016	1.00
	ATOM 8.81	2239	CG	PRO	462	28.069	59.631	69.369	1.00
45	ATOM 12.74	2240	C	PRO	462	31.052	60.732	67.606	1.00
	ATOM 10.85	2241	O	PRO	462	30.740	60.793	66.416	1.00
50	ATOM 17.47	2242	N	ASP	463	32.300	60.581	68.029	1.00
	ATOM 20.96	2244	CA	ASP	463	33.402	60.432	67.105	1.00
	ATOM 25.18	2245	CB	ASP	463	34.736	60.286	67.870	1.00
55	ATOM 28.15	2246	CG	ASP	463	35.087	61.512	68.707	1.00
	ATOM 29.78	2247	OD1	ASP	463	34.495	62.597	68.500	1.00

	ATOM	2248	OD2	ASP	463	35.975	61.388	69.582	1.00
	30.25								
	ATOM	2249	C	ASP	463	33.178	59.198	66.262	1.00
	21.24								
5	ATOM	2250	O	ASP	463	32.636	58.191	66.749	1.00
	21.61								
	ATOM	2251	N	ASN	464	33.463	59.319	64.973	1.00
	22.32								
10	ATOM	2253	CA	ASN	464	33.301	58.206	64.051	1.00
	23.87								
	ATOM	2254	CB	ASN	464	34.451	57.226	64.261	1.00
	26.43								
	ATOM	2255	CG	ASN	464	35.782	57.834	63.850	1.00
	28.16								
15	ATOM	2256	OD1	ASN	464	36.029	58.025	62.660	1.00
	32.70								
	ATOM	2257	ND2	ASN	464	36.591	58.236	64.820	1.00
	29.64								
	ATOM	2260	C	ASN	464	31.918	57.522	64.034	1.00
20	22.09								
	ATOM	2261	O	ASN	464	31.774	56.284	63.968	1.00
	22.34								
	ATOM	2262	N	CYS	465	30.885	58.347	64.139	1.00
	18.35								
25	ATOM	2264	CA	CYS	465	29.505	57.849	64.079	1.00
	13.90								
	ATOM	2265	CB	CYS	465	28.656	58.478	65.196	1.00
	12.88								
	ATOM	2266	SG	CYS	465	26.904	58.015	65.072	1.00
30	13.96								
	ATOM	2267	C	CYS	465	28.941	58.185	62.702	1.00
	14.12								
	ATOM	2268	O	CYS	465	29.052	59.332	62.251	1.00
	13.81								
35	ATOM	2269	N	PRO	466	28.501	57.172	61.945	1.00
	12.80								
	ATOM	2270	CD	PRO	466	28.509	55.743	62.333	1.00
	13.81								
	ATOM	2271	CA	PRO	466	27.930	57.356	60.609	1.00
40	11.16								
	ATOM	2272	CB	PRO	466	27.467	55.945	60.245	1.00
	12.22								
	ATOM	2273	CG	PRO	466	28.424	55.059	61.038	1.00
	11.55								
45	ATOM	2274	C	PRO	466	26.735	58.304	60.781	1.00
	8.89								
	ATOM	2275	O	PRO	466	25.944	58.167	61.759	1.00
	5.97								
	ATOM	2276	N	GLU	467	26.651	59.303	59.900	1.00
50	5.38								
	ATOM	2278	CA	GLU	467	25.556	60.286	60.003	1.00
	5.74								
	ATOM	2279	CB	GLU	467	25.705	61.399	58.937	1.00
	5.77								
55	ATOM	2280	CG	GLU	467	24.667	62.547	59.108	1.00
	7.30								
	ATOM	2281	CD	GLU	467	24.772	63.304	60.430	1.00
	8.60								

5	ATOM 12.73	2282	OE1	GLU	467	23.866	64.111	60.736	1.00
	ATOM 8.79	2283	OE2	GLU	467	25.779	63.148	61.157	1.00
	ATOM 3.94	2284	C	GLU	467	24.172	59.647	59.928	1.00
	ATOM 2.54	2285	O	GLU	467	23.238	60.090	60.610	1.00
10	ATOM 2.00	2286	N	GLU	468	24.018	58.578	59.144	0.51
	ATOM 2.00	2288	CA	GLU	468	22.731	57.898	59.098	0.51
	ATOM 2.00	2289	CB	GLU	468	22.777	56.699	58.155	0.51
	ATOM 2.00	2290	CG	GLU	468	22.728	57.056	56.720	0.51
15	ATOM 4.73	2291	CD	GLU	468	23.102	55.891	55.877	0.51
	ATOM 6.19	2292	OE1	GLU	468	24.312	55.744	55.699	0.51
	ATOM 2.79	2293	OE2	GLU	468	22.205	55.192	55.389	0.51
	ATOM 2.00	2294	C	GLU	468	22.274	57.412	60.486	0.51
20	ATOM 2.00	2295	O	GLU	468	21.133	57.557	60.870	0.51
	ATOM 2.68	2296	N	LEU	469	23.211	56.804	61.206	1.00
	ATOM 3.75	2298	CA	LEU	469	22.926	56.312	62.561	1.00
	ATOM 5.21	2299	CB	LEU	469	24.119	55.501	63.087	1.00
25	ATOM 4.76	2300	CG	LEU	469	23.928	54.801	64.441	1.00
	ATOM 6.81	2301	CD1	LEU	469	22.855	53.731	64.304	1.00
	ATOM 5.46	2302	CD2	LEU	469	25.248	54.097	64.824	1.00
	ATOM 3.44	2303	C	LEU	469	22.636	57.484	63.504	1.00
30	ATOM 5.45	2304	O	LEU	469	21.727	57.436	64.356	1.00
	ATOM 5.07	2305	N	TYR	470	23.416	58.563	63.369	1.00
	ATOM 4.26	2307	CA	TYR	470	23.161	59.732	64.240	1.00
	ATOM 4.94	2308	CB	TYR	470	24.186	60.877	63.983	1.00
35	ATOM 3.71	2309	CG	TYR	470	24.024	62.070	64.944	1.00
	ATOM 5.02	2310	CD1	TYR	470	24.180	61.905	66.310	1.00
	ATOM 5.96	2311	CE1	TYR	470	24.036	62.998	67.192	1.00
	ATOM 3.81	2312	CD2	TYR	470	23.716	63.357	64.454	1.00
40	ATOM 5.55	2313	CE2	TYR	470	23.588	64.425	65.296	1.00

5	ATOM 6.06	2314	CZ	TYR	470	23.746	64.245	66.668	1.00
	ATOM 9.89	2315	OH	TYR	470	23.642	65.311	67.523	1.00
	ATOM 4.76	2317	C	TYR	470	21.744	60.251	64.004	1.00
	ATOM 6.27	2318	O	TYR	470	21.031	60.618	64.942	1.00
10	ATOM 4.89	2319	N	GLN	471	21.310	60.291	62.739	1.00
	ATOM 4.63	2321	CA	GLN	471	19.956	60.783	62.482	1.00
	ATOM 4.81	2322	CB	GLN	471	19.774	61.108	61.000	1.00
	ATOM 5.80	2323	CG	GLN	471	20.553	62.364	60.572	1.00
15	ATOM 8.94	2324	CD	GLN	471	20.172	63.619	61.382	1.00
	ATOM 6.43	2325	OE1	GLN	471	18.992	63.860	61.704	1.00
	ATOM 7.01	2326	NE2	GLN	471	21.189	64.395	61.770	1.00
	ATOM 5.92	2329	C	GLN	471	18.877	59.834	63.002	1.00
20	ATOM 5.03	2330	O	GLN	471	17.741	60.243	63.289	1.00
	ATOM 4.53	2331	N	LEU	472	19.203	58.537	63.023	1.00
	ATOM 5.41	2333	CA	LEU	472	18.277	57.547	63.597	1.00
	ATOM 5.33	2334	CB	LEU	472	18.793	56.135	63.322	1.00
25	ATOM 6.16	2335	CG	LEU	472	17.748	55.057	63.605	1.00
	ATOM 8.74	2336	CD1	LEU	472	16.470	55.351	62.768	1.00
	ATOM 5.70	2337	CD2	LEU	472	18.332	53.678	63.277	1.00
	ATOM 4.27	2338	C	LEU	472	18.160	57.793	65.129	1.00
30	ATOM 6.39	2339	O	LEU	472	17.074	57.806	65.685	1.00
	ATOM 6.34	2340	N	MET	473	19.293	58.078	65.774	1.00
	ATOM 6.70	2342	CA	MET	473	19.332	58.428	67.193	1.00
	ATOM 6.82	2343	CB	MET	473	20.756	58.809	67.612	1.00
35	ATOM 9.25	2344	CG	MET	473	21.759	57.673	67.661	1.00
	ATOM 6.04	2345	SD	MET	473	23.425	58.348	67.650	1.00
	ATOM 7.69	2346	CE	MET	473	24.397	56.872	67.411	1.00
	ATOM 4.98	2347	C	MET	473	18.452	59.648	67.459	1.00
40	ATOM 5.18	2348	O	MET	473	17.673	59.676	68.417	1.00



5	ATOM 5.63	2349	N	ARG	474	18.588	60.666	66.603	1.00
	ATOM 6.92	2351	CA	ARG	474	17.775	61.881	66.772	1.00
	ATOM 9.55	2352	CB	ARG	474	18.084	62.926	65.676	1.00
	ATOM 11.83	2353	CG	ARG	474	19.539	63.314	65.490	1.00
	ATOM 18.94	2354	CD	ARG	474	20.051	64.228	66.556	1.00
10	ATOM 20.37	2355	NE	ARG	474	19.308	65.498	66.637	1.00
	ATOM 17.59	2357	CZ	ARG	474	19.840	66.644	67.043	1.00
	ATOM 12.90	2358	NH1	ARG	474	21.145	66.711	67.354	1.00
15	ATOM 17.79	2361	NH2	ARG	474	19.018	67.646	67.381	1.00
	ATOM 6.79	2364	C	ARG	474	16.280	61.538	66.722	1.00
	ATOM 5.98	2365	O	ARG	474	15.492	62.135	67.418	1.00
	ATOM 4.98	2366	N	LEU	475	15.888	60.572	65.882	1.00
20	ATOM 7.49	2368	CA	LEU	475	14.465	60.178	65.878	1.00
	ATOM 8.16	2369	CB	LEU	475	14.167	59.090	64.817	1.00
	ATOM 8.88	2370	CG	LEU	475	14.426	59.426	63.359	1.00
25	ATOM 10.43	2371	CD1	LEU	475	13.760	58.322	62.500	1.00
	ATOM 11.32	2372	CD2	LEU	475	13.781	60.775	63.021	1.00
	ATOM 4.96	2373	C	LEU	475	14.089	59.644	67.241	1.00
30	ATOM 6.19	2374	O	LEU	475	13.041	59.958	67.784	1.00
	ATOM 5.35	2375	N	CYS	476	14.971	58.818	67.822	1.00
	ATOM 6.09	2377	CA	CYS	476	14.706	58.295	69.168	1.00
	ATOM 4.98	2378	CB	CYS	476	15.836	57.340	69.601	1.00
35	ATOM 7.06	2379	SG	CYS	476	15.937	55.886	68.514	1.00
	ATOM 5.88	2380	C	CYS	476	14.576	59.387	70.217	1.00
	ATOM 4.37	2381	O	CYS	476	13.911	59.208	71.247	1.00
40	ATOM 6.18	2382	N	TRP	477	15.169	60.555	69.925	1.00
	ATOM 7.04	2384	CA	TRP	477	15.140	61.635	70.878	1.00
	ATOM 5.80	2385	CB	TRP	477	16.555	62.215	71.094	1.00
45	ATOM 6.60	2386	CG	TRP	477	17.609	61.203	71.440	1.00

	ATOM 6.30	2387	CD2	TRP	477	18.978	61.225	71.020	1.00
	ATOM 5.65	2388	CE2	TRP	477	19.611	60.098	71.597	1.00
5	ATOM 4.69	2389	CE3	TRP	477	19.732	62.080	70.200	1.00
	ATOM 4.40	2390	CD1	TRP	477	17.470	60.096	72.238	1.00
10	ATOM 6.25	2391	NE1	TRP	477	18.673	59.442	72.341	1.00
	ATOM 7.14	2393	CZ2	TRP	477	20.972	59.816	71.411	1.00
	ATOM 6.66	2394	CZ3	TRP	477	21.096	61.802	70.012	1.00
15	ATOM 5.75	2395	CH2	TRP	477	21.690	60.666	70.613	1.00
	ATOM 8.41	2396	C	TRP	477	14.165	62.757	70.546	1.00
20	ATOM 7.82	2397	O	TRP	477	14.359	63.894	70.986	1.00
	ATOM 10.81	2398	N	LYS	478	13.120	62.452	69.775	1.00
	ATOM 11.81	2400	CA	LYS	478	12.105	63.471	69.495	1.00
25	ATOM 13.76	2401	CB	LYS	478	11.058	62.957	68.486	1.00
	ATOM 15.00	2402	CG	LYS	478	11.632	63.105	67.055	1.00
30	ATOM 20.43	2403	CD	LYS	478	10.682	62.928	65.943	1.00
	ATOM 19.86	2404	CE	LYS	478	11.383	63.220	64.623	1.00
	ATOM 24.89	2405	NZ	LYS	478	11.498	64.682	64.302	1.00
35	ATOM 10.75	2409	C	LYS	478	11.483	63.966	70.785	1.00
	ATOM 10.57	2410	O	LYS	478	11.411	63.245	71.774	1.00
40	ATOM 11.76	2411	N	GLU	479	11.136	65.245	70.830	1.00
	ATOM 13.93	2413	CA	GLU	479	10.545	65.821	72.044	1.00
	ATOM 16.32	2414	CB	GLU	479	10.230	67.310	71.834	1.00
45	ATOM 22.00	2415	CG	GLU	479	9.745	67.956	73.108	1.00
	ATOM 26.69	2416	CD	GLU	479	10.869	68.064	74.118	1.00
50	ATOM 28.93	2417	OE1	GLU	479	12.055	68.130	73.685	1.00
	ATOM 29.48	2418	OE2	GLU	479	10.589	68.082	75.338	1.00
	ATOM 12.78	2419	C	GLU	479	9.272	65.117	72.511	1.00
55	ATOM 11.58	2420	O	GLU	479	9.128	64.715	73.663	1.00
	ATOM 13.56	2421	N	ARG	480	8.306	65.011	71.606	1.00

5	ATOM 14.11	2423	CA	ARG	480	7.068	64.316	71.953	1.00
	ATOM 16.76	2424	CB	ARG	480	5.920	64.768	71.023	1.00
	ATOM 20.08	2425	CG	ARG	480	5.682	66.296	71.022	1.00
	ATOM 25.32	2426	CD	ARG	480	4.356	66.616	70.378	1.00
10	ATOM 29.79	2427	NE	ARG	480	4.264	65.997	69.049	1.00
	ATOM 30.49	2429	CZ	ARG	480	3.132	65.818	68.372	1.00
	ATOM 33.45	2430	NH1	ARG	480	1.981	66.214	68.906	1.00
15	ATOM 29.91	2433	NH2	ARG	480	3.155	65.294	67.145	1.00
	ATOM 11.61	2436	C	ARG	480	7.226	62.786	71.838	1.00
	ATOM 9.25	2437	O	ARG	480	7.665	62.280	70.813	1.00
20	ATOM 11.62	2438	N	PRO	481	6.879	62.051	72.902	1.00
	ATOM 11.47	2439	CD	PRO	481	6.473	62.568	74.214	1.00
25	ATOM 11.78	2440	CA	PRO	481	6.972	60.581	72.911	1.00
	ATOM 11.23	2441	CB	PRO	481	6.221	60.207	74.172	1.00
	ATOM 14.23	2442	CG	PRO	481	6.615	61.347	75.110	1.00
30	ATOM 12.23	2443	C	PRO	481	6.337	59.969	71.667	1.00
	ATOM 11.31	2444	O	PRO	481	6.947	59.124	71.007	1.00
	ATOM 12.13	2445	N	GLU	482	5.175	60.488	71.269	1.00
35	ATOM 12.86	2447	CA	GLU	482	4.447	59.979	70.091	1.00
	ATOM 15.98	2448	CB	GLU	482	3.013	60.577	70.013	1.00
	ATOM 20.93	2449	CG	GLU	482	2.982	62.087	70.078	1.00
40	ATOM 25.76	2450	CD	GLU	482	2.561	62.602	71.463	1.00
	ATOM 30.37	2451	OE1	GLU	482	1.399	63.103	71.539	1.00
	ATOM 19.57	2452	OE2	GLU	482	3.341	62.508	72.459	1.00
50	ATOM 13.01	2453	C	GLU	482	5.142	60.162	68.762	1.00
	ATOM 12.54	2454	O	GLU	482	4.803	59.494	67.785	1.00
	ATOM 13.69	2455	N	ASP	483	6.112	61.079	68.700	1.00
55	ATOM 11.91	2457	CA	ASP	483	6.858	61.286	67.463	1.00
	ATOM 12.80	2458	CB	ASP	483	7.359	62.742	67.336	1.00

	ATOM 16.80	2459	CG	ASP	483	6.242	63.738	67.122	1.00
	ATOM 14.10	2460	OD1	ASP	483	5.167	63.357	66.598	1.00
5	ATOM 18.37	2461	OD2	ASP	483	6.434	64.909	67.523	1.00
	ATOM 9.87	2462	C	ASP	483	8.040	60.333	67.313	1.00
10	ATOM 11.58	2463	O	ASP	483	8.668	60.268	66.246	1.00
	ATOM 8.94	2464	N	ARG	484	8.393	59.643	68.401	1.00
	ATOM 6.66	2466	CA	ARG	484	9.491	58.681	68.355	1.00
15	ATOM 7.83	2467	CB	ARG	484	9.964	58.350	69.776	1.00
	ATOM 7.05	2468	CG	ARG	484	10.257	59.553	70.614	1.00
	ATOM 6.98	2469	CD	ARG	484	10.649	59.211	72.052	1.00
20	ATOM 4.90	2470	NE	ARG	484	10.804	60.448	72.789	1.00
	ATOM 7.72	2472	CZ	ARG	484	10.601	60.560	74.100	1.00
25	ATOM 5.26	2473	NH1	ARG	484	10.308	59.488	74.824	1.00
	ATOM 7.38	2476	NH2	ARG	484	10.480	61.778	74.664	1.00
	ATOM 8.43	2479	C	ARG	484	9.012	57.428	67.601	1.00
30	ATOM 7.27	2480	O	ARG	484	7.859	57.041	67.691	1.00
	ATOM 7.08	2481	N	PRO	485	9.904	56.794	66.826	1.00
35	ATOM 5.37	2482	CD	PRO	485	11.361	57.012	66.755	1.00
	ATOM 8.48	2483	CA	PRO	485	9.486	55.624	66.074	1.00
	ATOM 6.52	2484	CB	PRO	485	10.647	55.404	65.103	1.00
40	ATOM 8.65	2485	CG	PRO	485	11.831	55.885	65.885	1.00
	ATOM 7.59	2486	C	PRO	485	9.252	54.418	66.954	1.00
45	ATOM 4.04	2487	O	PRO	485	9.514	54.440	68.161	1.00
	ATOM 6.13	2488	N	THR	486	8.685	53.379	66.341	1.00
	ATOM 6.49	2490	CA	THR	486	8.509	52.125	67.031	1.00
50	ATOM 7.20	2491	CB	THR	486	7.424	51.227	66.336	1.00
	ATOM 5.76	2492	OG1	THR	486	7.836	50.985	64.982	1.00
55	ATOM 9.07	2494	CG2	THR	486	6.033	51.934	66.341	1.00
	ATOM 6.99	2495	C	THR	486	9.796	51.346	66.939	1.00

5	ATOM	2496	O	THR	486	10.661	51.612	66.071	1.00
	5.95								
	ATOM	2497	N	PHE	487	9.895	50.303	67.768	1.00
	7.41								
10	ATOM	2499	CA	PHE	487	11.051	49.435	67.728	1.00
	7.05								
	ATOM	2500	CB	PHE	487	11.099	48.583	69.028	1.00
	5.13								
15	ATOM	2501	CG	PHE	487	11.732	49.287	70.144	1.00
	2.90								
	ATOM	2502	CD1	PHE	487	13.112	49.564	70.101	1.00
	3.27								
20	ATOM	2503	CD2	PHE	487	10.990	49.718	71.250	1.00
	2.00								
	ATOM	2504	CE1	PHE	487	13.721	50.242	71.155	1.00
	2.00								
25	ATOM	2505	CE2	PHE	487	11.570	50.374	72.264	1.00
	2.00								
	ATOM	2506	CZ	PHE	487	12.973	50.658	72.235	1.00
	2.70								
30	ATOM	2507	C	PHE	487	11.039	48.600	66.477	1.00
	6.52								
	ATOM	2508	O	PHE	487	12.095	48.253	65.952	1.00
	5.26								
35	ATOM	2509	N	ASP	488	9.835	48.254	65.986	1.00
	6.84								
	ATOM	2511	CA	ASP	488	9.791	47.504	64.736	1.00
	10.14								
40	ATOM	2512	CB	ASP	488	8.379	46.948	64.417	1.00
	13.68								
	ATOM	2513	CG	ASP	488	8.419	45.877	63.300	1.00
	18.95								
45	ATOM	2514	OD1	ASP	488	9.060	44.814	63.483	1.00
	21.79								
	ATOM	2515	OD2	ASP	488	7.859	46.115	62.225	1.00
	23.85								
50	ATOM	2516	C	ASP	488	10.344	48.378	63.576	1.00
	8.80								
	ATOM	2517	O	ASP	488	11.000	47.882	62.677	1.00
	9.13								
55	ATOM	2518	N	TYR	489	10.065	49.681	63.611	1.00
	8.36								
	ATOM	2520	CA	TYR	489	10.648	50.587	62.606	1.00
	7.68								
55	ATOM	2521	CB	TYR	489	10.053	52.001	62.730	1.00
	7.51								
	ATOM	2522	CG	TYR	489	10.712	53.012	61.813	1.00
	9.26								
55	ATOM	2523	CD1	TYR	489	10.269	53.190	60.505	1.00
	9.70								
	ATOM	2524	CE1	TYR	489	10.858	54.146	59.666	1.00
	10.43								
55	ATOM	2525	CD2	TYR	489	11.778	53.801	62.255	1.00
	10.00								
	ATOM	2526	CE2	TYR	489	12.382	54.748	61.421	1.00
	11.07								
55	ATOM	2527	CZ	TYR	489	11.922	54.913	60.122	1.00
	11.40								

	ATOM 9.64	2528	OH	TYR	489	12.535	55.819	59.272	1.00
	ATOM 5.72	2530	C	TYR	489	12.188	50.652	62.763	1.00
5	ATOM 7.93	2531	O	TYR	489	12.926	50.492	61.825	1.00
	ATOM 5.65	2532	N	LEU	490	12.675	50.858	63.992	1.00
10	ATOM 4.64	2534	CA	LEU	490	14.116	50.877	64.228	1.00
	ATOM 5.14	2535	CB	LEU	490	14.377	51.126	65.726	1.00
	ATOM 3.68	2536	CG	LEU	490	13.994	52.554	66.205	1.00
15	ATOM 6.17	2537	CD1	LEU	490	13.894	52.619	67.761	1.00
	ATOM 5.67	2538	CD2	LEU	490	15.121	53.481	65.721	1.00
20	ATOM 6.45	2539	C	LEU	490	14.795	49.575	63.763	1.00
	ATOM 4.40	2540	O	LEU	490	15.853	49.569	63.139	1.00
	ATOM 6.90	2541	N	ARG	491	14.150	48.438	64.049	1.00
25	ATOM 6.24	2543	CA	ARG	491	14.713	47.172	63.614	1.00
	ATOM 7.39	2544	CB	ARG	491	13.807	46.024	64.085	1.00
30	ATOM 13.33	2545	CG	ARG	491	14.249	44.589	63.595	1.00
	ATOM 16.63	2546	CD	ARG	491	13.006	43.783	63.232	1.00
	ATOM 23.18	2547	NE	ARG	491	12.852	43.719	61.777	1.00
35	ATOM 22.69	2549	CZ	ARG	491	11.840	44.176	61.047	1.00
	ATOM 23.32	2550	NH1	ARG	491	10.783	44.798	61.560	1.00
40	ATOM 26.41	2553	NH2	ARG	491	11.857	43.907	59.766	1.00
	ATOM 6.15	2556	C	ARG	491	14.845	47.138	62.078	1.00
	ATOM 8.27	2557	O	ARG	491	15.887	46.767	61.512	1.00
45	ATOM 5.72	2558	N	SER	492	13.781	47.533	61.401	0.71
	ATOM 5.48	2560	CA	SER	492	13.771	47.514	59.941	0.71
50	ATOM 7.19	2561	CB	SER	492	12.379	47.952	59.447	0.71
	ATOM 11.62	2562	OG	SER	492	12.296	47.757	58.055	0.71
	ATOM 4.57	2564	C	SER	492	14.867	48.388	59.320	0.71
55	ATOM 2.00	2565	O	SER	492	15.580	47.991	58.402	0.71
	ATOM 5.21	2566	N	VAL	493	14.996	49.609	59.845	1.00

5	ATOM 4.52	2568	CA	VAL	493	16.013	50.529	59.366	1.00
	ATOM 5.78	2569	CB	VAL	493	15.809	51.921	60.073	1.00
	ATOM 5.45	2570	CG1	VAL	493	16.988	52.876	59.825	1.00
	ATOM 7.49	2571	CG2	VAL	493	14.535	52.548	59.627	1.00
	ATOM 3.86	2572	C	VAL	493	17.436	50.006	59.632	1.00
10	ATOM 5.74	2573	O	VAL	493	18.299	50.059	58.791	1.00
	ATOM 4.14	2574	N	LEU	494	17.693	49.544	60.857	1.00
	ATOM 6.78	2576	CA	LEU	494	19.040	49.061	61.174	1.00
15	ATOM 4.46	2577	CB	LEU	494	19.186	48.810	62.671	1.00
	ATOM 4.63	2578	CG	LEU	494	19.141	50.121	63.485	1.00
	ATOM 4.58	2579	CD1	LEU	494	18.661	49.807	64.958	1.00
20	ATOM 2.17	2580	CD2	LEU	494	20.541	50.809	63.475	1.00
	ATOM 7.37	2581	C	LEU	494	19.484	47.834	60.330	1.00
	ATOM 6.93	2582	O	LEU	494	20.684	47.665	60.050	1.00
30	ATOM 7.28	2583	N	GLU	495	18.503	47.015	59.941	1.00
	ATOM 10.08	2585	CA	GLU	495	18.770	45.865	59.055	1.00
	ATOM 9.68	2586	CB	GLU	495	17.552	44.917	59.002	1.00
35	ATOM 12.01	2587	CG	GLU	495	17.314	44.174	60.318	1.00
	ATOM 18.21	2588	CD	GLU	495	16.180	43.152	60.257	1.00
	ATOM 17.97	2589	OE1	GLU	495	15.568	42.977	59.163	1.00
40	ATOM 19.73	2590	OE2	GLU	495	15.881	42.524	61.313	1.00
	ATOM 7.94	2591	C	GLU	495	19.154	46.382	57.647	1.00
	ATOM 8.27	2592	O	GLU	495	20.078	45.902	57.002	1.00
45	ATOM 9.27	2593	N	ASP	496	18.494	47.446	57.222	1.00
	ATOM 9.40	2595	CA	ASP	496	18.840	48.047	55.932	1.00
	ATOM 9.76	2596	CB	ASP	496	17.801	49.109	55.543	1.00
50	ATOM 9.08	2597	CG	ASP	496	16.529	48.508	55.005	1.00
	ATOM 13.10	2598	OD1	ASP	496	16.546	47.317	54.624	1.00
	ATOM 8.40	2599	OD2	ASP	496	15.506	49.203	54.934	1.00

5	ATOM 9.38	2600	C	ASP	496	20.231	48.655	56.023	1.00
	ATOM 9.97	2601	O	ASP	496	21.073	48.442	55.132	1.00
	ATOM 9.58	2602	N	PHE	497	20.533	49.304	57.151	1.00
	ATOM 10.82	2604	CA	PHE	497	21.848	49.897	57.349	1.00
10	ATOM 10.33	2605	CB	PHE	497	21.947	50.567	58.730	1.00
	ATOM 8.98	2606	CG	PHE	497	21.261	51.910	58.846	1.00
	ATOM 9.24	2607	CD1	PHE	497	20.500	52.438	57.804	1.00
15	ATOM 8.40	2608	CD2	PHE	497	21.440	52.673	59.987	1.00
	ATOM 9.15	2609	CE1	PHE	497	19.829	53.667	57.950	1.00
	ATOM 9.96	2610	CE2	PHE	497	20.777	53.910	60.153	1.00
20	ATOM 8.87	2611	CZ	PHE	497	20.007	54.428	59.111	1.00
	ATOM 12.89	2612	C	PHE	497	22.950	48.816	57.273	1.00
	ATOM 11.96	2613	O	PHE	497	23.970	48.965	56.612	1.00
25	ATOM 14.97	2614	N	PHE	498	22.697	47.728	57.996	1.00
	ATOM 20.02	2616	CA	PHE	498	23.598	46.574	58.066	1.00
	ATOM 20.25	2617	CB	PHE	498	23.036	45.591	59.157	1.00
30	ATOM 22.23	2618	CG	PHE	498	23.576	44.196	59.110	1.00
	ATOM 22.93	2619	CD1	PHE	498	24.928	43.940	59.094	1.00
	ATOM 26.01	2620	CD2	PHE	498	22.695	43.118	59.149	1.00
35	ATOM 24.58	2621	CE1	PHE	498	25.397	42.624	59.110	1.00
	ATOM 24.88	2622	CE2	PHE	498	23.147	41.813	59.165	1.00
	ATOM 24.56	2623	CZ	PHE	498	24.497	41.560	59.147	1.00
40	ATOM 21.85	2624	C	PHE	498	23.762	45.903	56.700	1.00
	ATOM 22.72	2625	O	PHE	498	24.864	45.729	56.220	1.00
	ATOM 24.16	2626	N	THR	499	22.649	45.632	56.036	1.00
45	ATOM 28.58	2628	CA	THR	499	22.697	44.965	54.747	1.00
	ATOM 27.62	2629	CB	THR	499	21.426	44.126	54.498	1.00
	ATOM 29.10	2630	OG1	THR	499	20.310	44.997	54.393	1.00
55	ATOM 29.27	2632	CG2	THR	499	21.167	43.190	55.659	1.00



	ATOM	2633	C	THR	499	22.932	45.913	53.594	1.00
	32.13								
	ATOM	2634	O	THR	499	22.396	45.726	52.492	1.00
	33.33								
5	ATOM	2635	N	ALA	500	23.726	46.937	53.900	1.00
	33.44								
	ATOM	2637	CA	ALA	500	24.182	48.016	53.028	1.00
	35.24								
10	ATOM	2638	CB	ALA	500	23.417	49.327	53.341	1.00
	34.45								
	ATOM	2639	C	ALA	500	25.672	48.223	53.293	1.00
	36.18								
	ATOM	2640	O	ALA	500	26.454	48.448	52.368	1.00
	37.53								
15	ATOM	2641	N	THR	501	26.062	48.167	54.575	1.00
	35.49								
	ATOM	2643	CA	THR	501	27.477	48.285	54.968	1.00
	35.21								
20	ATOM	2644	CB	THR	501	27.660	48.803	56.434	1.00
	34.98								
	ATOM	2645	OG1	THR	501	27.065	47.864	57.335	1.00
	34.15								
	ATOM	2647	CG2	THR	501	27.027	50.190	56.633	1.00
	33.83								
25	ATOM	2648	C	THR	501	28.184	46.918	54.862	1.00
	36.81								
	ATOM	2649	O	THR	501	27.963	46.234	53.833	1.00
	36.26								
30	ATOM	2650	OT	THR	501	28.927	46.526	55.809	1.00
	37.49								
	ATOM	2651	OH2	TIP	1	19.311	61.451	77.517	1.00
	9.51								
	ATOM	2654	OH2	TIP	2	21.927	30.146	74.495	1.00
	10.87								
35	ATOM	2657	OH2	TIP	3	16.683	33.287	74.355	1.00
	9.01								
	ATOM	2660	OH2	TIP	4	39.739	38.338	73.029	1.00
	16.54								
40	ATOM	2663	OH2	TIP	5	14.739	52.071	79.171	1.00
	10.02								
	ATOM	2666	OH2	TIP	6	20.566	63.204	73.067	1.00
	10.44								
	ATOM	2669	OH2	TIP	7	26.999	32.025	74.946	1.00
	11.15								
45	ATOM	2672	OH2	TIP	8	24.523	79.325	73.707	1.00
	12.34								
	ATOM	2675	OH2	TIP	9	26.415	24.060	78.113	1.00
	11.63								
50	ATOM	2678	OH2	TIP	10	25.241	50.846	79.942	1.00
	4.37								
	ATOM	2681	OH2	TIP	11	23.356	20.960	77.886	1.00
	10.04								
	ATOM	2684	OH2	TIP	12	26.225	73.383	70.539	1.00
	11.22								
55	ATOM	2687	OH2	TIP	13	13.101	71.939	72.454	1.00
	15.78								
	ATOM	2690	OH2	TIP	14	28.040	56.696	74.337	1.00
	10.46								

5	ATOM	2693	OH2 TIP	15	13.599	34.317	76.278	1.00
	11.77							
	ATOM	2696	OH2 TIP	16	14.407	25.394	81.101	1.00
10	12.52							
	ATOM	2699	OH2 TIP	17	22.531	19.149	81.866	1.00
	11.75							
15	ATOM	2702	OH2 TIP	18	3.993	51.722	76.108	1.00
	12.20							
	ATOM	2705	OH2 TIP	19	33.188	40.683	77.485	1.00
20	16.97							
	ATOM	2708	OH2 TIP	20	30.131	18.456	80.658	1.00
	11.69							
25	ATOM	2711	OH2 TIP	21	28.146	53.808	78.726	1.00
	10.89							
	ATOM	2714	OH2 TIP	22	5.966	57.823	65.467	1.00
30	25.51							
	ATOM	2717	OH2 TIP	23	4.770	47.784	75.121	1.00
	11.19							
35	ATOM	2720	OH2 TIP	24	29.430	62.780	71.874	1.00
	12.30							
	ATOM	2723	OH2 TIP	25	23.569	29.609	76.723	1.00
40	15.79							
	ATOM	2726	OH2 TIP	26	19.387	28.532	78.780	1.00
	11.30							
45	ATOM	2729	OH2 TIP	27	30.446	41.985	81.415	1.00
	12.69							
	ATOM	2732	OH2 TIP	28	26.750	65.828	74.084	1.00
50	12.12							
	ATOM	2735	OH2 TIP	29	16.554	62.515	62.377	1.00
	12.02							
55	ATOM	2738	OH2 TIP	30	4.250	54.927	67.119	1.00
	11.65							
	ATOM	2741	OH2 TIP	31	11.960	33.677	79.416	1.00
60	11.53							
	ATOM	2744	OH2 TIP	32	17.879	62.427	79.648	1.00
	12.18							
65	ATOM	2747	OH2 TIP	33	25.759	21.951	76.518	1.00
	11.64							
	ATOM	2750	OH2 TIP	34	4.279	16.551	94.709	1.00
70	8.69							
	ATOM	2753	OH2 TIP	35	43.046	45.255	71.148	1.00
	17.41							
75	ATOM	2756	OH2 TIP	36	33.552	42.873	62.416	1.00
	12.80							
	ATOM	2759	OH2 TIP	37	24.371	69.370	70.424	1.00
80	12.19							
	ATOM	2762	OH2 TIP	38	8.595	65.929	68.815	1.00
	10.23							
85	ATOM	2765	OH2 TIP	39	16.431	52.748	84.453	1.00
	13.16							
	ATOM	2768	OH2 TIP	40	26.298	70.962	71.663	1.00
90	16.76							
	ATOM	2771	OH2 TIP	41	40.273	44.193	77.523	1.00
	18.95							
95	ATOM	2774	OH2 TIP	42	11.838	33.972	69.173	1.00
	15.53							
	ATOM	2777	OH2 TIP	43	1.764	39.205	79.803	1.00
100	29.10							

5	ATOM 14.52	2780	OH2 TIP	44	13.713	56.017	79.376	1.00
	ATOM 11.88	2783	OH2 TIP	45	6.708	45.582	67.704	1.00
	ATOM 19.42	2786	OH2 TIP	46	17.978	38.720	82.589	1.00
10	ATOM 19.83	2789	OH2 TIP	47	20.013	71.383	84.993	1.00
	ATOM 13.60	2792	OH2 TIP	48	23.308	59.317	84.264	1.00
	ATOM 23.35	2795	OH2 TIP	49	17.831	34.267	99.574	1.00
15	ATOM 14.39	2798	OH2 TIP	50	15.163	19.433	87.833	1.00
	ATOM 20.47	2801	OH2 TIP	51	36.528	39.376	74.325	1.00
	ATOM 31.69	2804	OH2 TIP	52	30.957	70.019	72.459	1.00
20	ATOM 33.78	2807	OH2 TIP	53	22.787	58.814	87.531	1.00
	ATOM 19.58	2810	OH2 TIP	54	3.052	57.417	68.084	1.00
	ATOM 19.36	2813	OH2 TIP	55	13.253	23.640	94.461	1.00
25	ATOM 27.49	2816	OH2 TIP	56	35.613	44.620	79.222	1.00
	ATOM 23.67	2819	OH2 TIP	57	26.527	64.552	87.243	1.00
	ATOM 17.76	2822	OH2 TIP	58	28.903	71.148	70.501	1.00
30	ATOM 15.12	2825	OH2 TIP	59	29.760	58.827	74.516	1.00
	ATOM 18.72	2828	OH2 TIP	60	43.367	40.547	77.280	1.00
	ATOM 24.23	2831	OH2 TIP	61	15.982	75.980	77.993	1.00
35	ATOM 27.51	2834	OH2 TIP	62	32.897	34.167	71.680	1.00
	ATOM 19.01	2837	OH2 TIP	63	6.623	58.163	77.247	1.00
	ATOM 15.41	2840	OH2 TIP	64	30.113	60.394	72.292	1.00
40	ATOM 30.72	2843	OH2 TIP	65	3.586	40.599	83.831	1.00
	ATOM 19.30	2846	OH2 TIP	66	27.441	51.105	81.647	1.00
	ATOM 16.22	2849	OH2 TIP	67	24.529	67.677	74.244	1.00
45	ATOM 24.52	2852	OH2 TIP	68	19.038	52.615	83.053	1.00
	ATOM 23.79	2855	OH2 TIP	69	25.114	31.789	71.057	1.00
	ATOM 17.72	2858	OH2 TIP	70	9.969	59.436	64.059	1.00
50	ATOM 18.42	2861	OH2 TIP	71	29.504	66.330	74.969	1.00
	ATOM 12.22	2864	OH2 TIP	72	6.497	52.369	69.874	1.00

5	ATOM 34.15	2867	OH2 TIP	73	14.390	22.955	83.276	1.00
	ATOM 19.72	2870	OH2 TIP	74	27.616	25.173	94.161	1.00
	ATOM 16.84	2873	OH2 TIP	75	-1.474	21.109	94.026	1.00
	ATOM 29.78	2876	OH2 TIP	76	7.073	27.726	99.566	1.00
10	ATOM 14.43	2879	OH2 TIP	77	3.184	17.629	92.263	1.00
	ATOM 18.23	2882	OH2 TIP	78	10.524	41.239	67.027	1.00
	ATOM 19.87	2885	OH2 TIP	79	13.981	69.635	73.583	1.00
15	ATOM 19.18	2888	OH2 TIP	80	15.009	39.727	90.769	1.00
	ATOM 13.29	2891	OH2 TIP	81	17.180	29.359	79.794	1.00
	ATOM 30.33	2894	OH2 TIP	82	8.570	33.844	71.005	1.00
20	ATOM 21.60	2897	OH2 TIP	83	27.624	20.321	77.495	1.00
	ATOM 22.43	2900	OH2 TIP	84	14.470	25.077	74.515	1.00
	ATOM 33.81	2903	OH2 TIP	85	15.658	69.961	86.496	1.00
25	ATOM 18.89	2906	OH2 TIP	86	4.347	43.749	85.189	1.00
	ATOM 19.63	2909	OH2 TIP	87	13.646	22.495	79.270	1.00
	ATOM 22.73	2912	OH2 TIP	88	34.351	49.689	60.577	1.00
30	ATOM 23.49	2915	OH2 TIP	89	4.570	27.575	95.849	1.00
	ATOM 33.95	2918	OH2 TIP	90	14.488	65.973	82.024	1.00
	ATOM 9.67	2921	OH2 TIP	91	14.199	45.984	83.667	1.00
35	ATOM 28.99	2924	OH2 TIP	92	12.650	36.289	79.191	1.00
	ATOM 14.74	2927	OH2 TIP	93	7.704	54.375	63.754	1.00
	ATOM 13.30	2930	OH2 TIP	94	41.632	44.586	69.191	1.00
40	ATOM 11.35	2933	OH2 TIP	95	22.332	28.550	79.220	1.00
	ATOM 40.43	2936	OH2 TIP	96	3.508	56.701	74.135	1.00
	ATOM 14.29	2939	OH2 TIP	97	13.230	31.893	74.970	1.00
45	ATOM 36.97	2942	OH2 TIP	98	30.226	70.647	76.992	1.00
	ATOM 30.61	2945	OH2 TIP	99	30.660	29.412	77.031	1.00
	ATOM 35.05	2948	OH2 TIP	100	3.867	29.346	100.830	1.00
55	ATOM 42.40	2951	OH2 TIP	101	3.305	31.423	85.206	1.00

	ATOM	2954	OH2 TIP	102	19.769	33.131	97.641	1.00
	34.70							
	ATOM	2957	OH2 TIP	103	32.525	60.209	71.096	1.00
	26.31							
5	ATOM	2960	OH2 TIP	104	14.385	18.965	81.633	1.00
	39.40							
	ATOM	2963	OH2 TIP	105	35.303	37.590	69.165	1.00
	47.36							
10	ATOM	2966	OH2 TIP	106	12.150	44.315	98.941	1.00
	27.18							
	ATOM	2969	OH2 TIP	107	31.404	65.727	72.463	1.00
	34.79							
	ATOM	2972	OH2 TIP	108	1.407	57.920	64.929	1.00
	48.77							
15	ATOM	2975	OH2 TIP	109	9.310	40.098	102.788	1.00
	23.64							
	ATOM	2978	OH2 TIP	110	-0.848	51.009	82.212	1.00
	38.03							
20	ATOM	2981	OH2 TIP	111	13.086	42.678	102.403	1.00
	39.17							
	ATOM	2984	OH2 TIP	112	1.621	52.914	87.041	1.00
	27.63							
	ATOM	2987	OH2 TIP	113	10.616	25.358	97.769	1.00
	46.48							
25	ATOM	2990	OH2 TIP	114	2.753	32.296	80.523	1.00
	54.81							
	ATOM	2993	OH2 TIP	115	19.151	70.156	86.599	1.00
	22.62							
30	ATOM	2996	OH2 TIP	116	3.297	33.113	89.038	1.00
	44.00							
	ATOM	2999	OH2 TIP	117	12.148	21.276	94.594	1.00
	30.07							
	ATOM	3002	OH2 TIP	118	9.743	70.112	82.946	1.00
	25.91							
35	ATOM	3005	OH2 TIP	119	43.117	37.524	68.875	1.00
	37.83							
	ATOM	3008	OH2 TIP	120	22.806	32.177	72.420	1.00
	27.17							
40	ATOM	3011	OH2 TIP	121	12.282	70.067	76.126	1.00
	45.70							
	ATOM	3014	OH2 TIP	122	-0.783	32.259	88.769	1.00
	33.61							
	ATOM	3017	OH2 TIP	123	32.388	39.732	89.901	1.00
	32.87							
45	ATOM	3020	OH2 TIP	124	7.556	27.635	91.724	1.00
	31.46							
	ATOM	3023	OH2 TIP	125	4.664	63.106	77.282	1.00
	41.06							
50	ATOM	3026	OH2 TIP	126	7.065	70.330	72.529	1.00
	49.77							
	ATOM	3029	OH2 TIP	127	10.158	28.414	102.841	1.00
	48.00							
	ATOM	3032	OH2 TIP	128	17.158	52.424	87.288	1.00
	19.66							
55	ATOM	3035	OH2 TIP	129	30.654	73.854	75.647	1.00
	44.45							
	ATOM	3038	OH2 TIP	130	8.181	21.129	91.405	1.00
	19.36							

	ATOM	3041	OH2	TIP	131	30.265	26.627	76.393	1.00
	44.63								
	ATOM	3044	OH2	TIP	132	1.404	36.670	96.617	1.00
	37.69								
5	ATOM	3047	OH2	TIP	133	27.398	58.917	84.327	1.00
	36.32								
	ATOM	3050	OH2	TIP	134	26.579	75.000	74.442	1.00
	23.63								
10	ATOM	3053	OH2	TIP	135	4.864	37.496	69.248	1.00
	51.76								
	ATOM	3056	OH2	TIP	136	38.759	60.728	66.988	1.00
	46.94								
	ATOM	3059	OH2	TIP	137	7.041	27.787	102.352	1.00
	31.69								
15	ATOM	3062	OH2	TIP	138	1.044	56.406	73.837	1.00
	54.98								
	ATOM	3065	OH2	TIP	139	0.020	59.351	68.080	1.00
	43.88								
	ATOM	3068	OH2	TIP	140	24.025	74.725	76.829	1.00
20	25.03								
	ATOM	3071	OH2	TIP	141	24.528	53.450	56.345	1.00
	40.36								
	ATOM	3074	OH2	TIP	142	32.470	40.634	63.102	1.00
	43.71								
25	ATOM	3077	OH2	TIP	143	35.837	41.876	83.267	1.00
	42.17								
	ATOM	3080	OH2	TIP	144	13.772	74.524	73.842	1.00
	21.66								
	ATOM	3083	OH2	TIP	145	11.507	59.640	87.674	1.00
30	29.61								
	ATOM	3086	OH2	TIP	146	35.527	33.428	69.247	1.00
	55.37								
	ATOM	3089	OH2	TIP	147	-1.325	20.750	100.326	1.00
	20.28								
35	ATOM	3092	OH2	TIP	148	8.007	41.733	67.424	1.00
	42.05								
	ATOM	3095	OH2	TIP	149	-1.487	56.737	73.798	1.00
	54.86								
	ATOM	3098	OH2	TIP	150	6.452	37.420	92.986	1.00
40	37.34								
	ATOM	3101	OH2	TIP	151	3.247	49.993	70.994	1.00
	34.95								
	ATOM	3104	S	SO4	901	20.457	33.124	69.153	1.00
	10.65								
45	ATOM	3105	O1	SO4	901	20.257	32.482	70.403	1.00
	11.07								
	ATOM	3106	O2	SO4	901	19.170	33.561	68.666	1.00
	10.55								
	ATOM	3107	O3	SO4	901	21.309	34.278	69.356	1.00
50	11.81								
	ATOM	3108	O4	SO4	901	21.109	32.174	68.216	1.00
	8.82								
	ATOM	3109	O4	STU	1	26.535	40.495	85.876	1.00
	11.24								
55	ATOM	3110	C25	STU	1	27.502	40.339	84.840	1.00
	9.72								
	ATOM	3111	C24	STU	1	27.822	41.685	84.136	1.00
	10.96								

	ATOM 12.11	3112	C23	STU	1	26.945	42.806	84.728	1.00
	ATOM 12.20	3113	C22	STU	1	25.446	42.387	84.626	1.00
5	ATOM 11.74	3114	C21	STU	1	25.305	41.210	85.651	1.00
	ATOM 10.18	3115	C26	STU	1	24.993	41.810	86.999	1.00
10	ATOM 8.64	3116	N2	STU	1	24.278	40.197	85.248	1.00
	ATOM 7.31	3117	C18	STU	1	24.601	39.145	84.402	1.00
	ATOM 8.67	3118	C19	STU	1	25.764	38.773	83.853	1.00
15	ATOM 6.68	3119	C6	STU	1	25.858	37.605	82.996	1.00
	ATOM 5.78	3120	C7	STU	1	24.603	36.902	82.801	1.00
20	ATOM 5.78	3121	C10	STU	1	23.475	37.277	83.341	1.00
	ATOM 7.21	3122	C11	STU	1	23.380	38.427	84.169	1.00
	ATOM 8.03	3123	C12	STU	1	22.339	39.076	84.853	1.00
25	ATOM 7.47	3124	C17	STU	1	22.898	40.224	85.534	1.00
	ATOM 10.26	3125	C16	STU	1	22.083	41.046	86.257	1.00
30	ATOM 7.20	3126	C15	STU	1	20.716	40.769	86.371	1.00
	ATOM 8.16	3127	C14	STU	1	20.171	39.651	85.714	1.00
	ATOM 7.93	3128	C13	STU	1	20.985	38.816	84.968	1.00
35	ATOM 6.61	3129	C9	STU	1	22.330	36.321	82.954	1.00
	ATOM 7.37	3130	N1	STU	1	23.082	35.431	82.089	1.00
40	ATOM 6.69	3131	C8	STU	1	24.394	35.657	81.967	1.00
	ATOM 9.35	3132	O5	STU	1	25.212	35.024	81.341	1.00
	ATOM 8.25	3133	C5	STU	1	27.220	37.488	82.579	1.00
45	ATOM 8.48	3134	C20	STU	1	27.911	38.565	83.172	1.00
	ATOM 10.31	3135	C1	STU	1	29.291	38.755	82.956	1.00
50	ATOM 7.16	3136	C2	STU	1	29.958	37.837	82.165	1.00
	ATOM 6.36	3137	C3	STU	1	29.269	36.771	81.567	1.00
	ATOM 6.70	3138	C4	STU	1	27.892	36.595	81.781	1.00
55	ATOM 11.36	3139	N3	STU	1	27.065	39.299	83.909	1.00
	ATOM 15.68	3140	O6	STU	1	25.269	41.898	83.285	1.00

	ATOM	3141	C27	STU	1	24.060	42.366	82.717	1.00
	16.90								
	ATOM	3142	N4	STU	1	27.204	44.135	83.925	1.00
	14.54								
5	ATOM	3143	C28	STU	1	28.684	44.317	83.715	1.00
	18.14								

END

10



Table 5

Table of the statistics of diffraction data and refined complex structures

		Reso	Rsym (*)	Complete	unique	observed	Rref	Rfree
5								
	AMP-PNP1	1.6O	5.9 (14.5%)	98 (96%)	38,529	258,235	20.0%	
	23.0%							
	AMP-PNP2	2.2O	4.2 (11.6%)	96 (95%)	15,024	54,174	23.7%	
10	27.0%							
	Staurosporine	2.0O	5.9 (12.1%)	99 (100%)	20,010	161,934	19.5%	
	23.7%							
15	PP2	2.0O	8.2 (19.8%)	93 (90%)	19,946	53,618	18.9%	
	25.4%							

20 Note: Rsyms in the parentheses are for the highest resolution shell. Fobs greater than  
 1 $\sigma$  are used in the structural refinement. In all the structures residues 231 to 501 of  
 Lck are included in the final refined model with water molecules added. The N- and  
 C- terminal segments (GS-225-230 and 502-509) are however disordered (GS are the  
 two extra residues left from the thrombin cleavage). The RMS bond length and angles  
 25 for the AMP-PNP/Lck complex, staurosporine and PP2 are 0.018O /2.1°,  
 0.019O/2.0°, 0.018O/1.8°, respectively. AMP-PNP1 and AMP-PNP2 diffraction data  
 correspond to Table 2 and Table 3 respectively.

30

CLAIMS

What is claimed is:

- 5           1.     A crystal of a protein-ligand complex comprising a protein-ligand complex of a truncated lck and a ligand, wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms; and wherein the truncated lck: (a) comprises amino acids 225 to 508 of SEQ ID NO: 1 or an amino acid sequence that  
10       differs from amino acids 225 to 508 of SEQ ID NO: 1 by only conservative substitutions; and (b) retains the globular core of the corresponding full-length lck.
2.     The crystal of claim 1, wherein the truncated lck comprises an amino acid sequence of amino acids 251 to 371 of SEQ ID NO: 1, or an amino acid sequence  
15       that differs from amino acids 251 to 371 of SEQ ID NO: 1 by only conservative substitutions.
3.     The crystal of claim 1 or 2, wherein the ligand is AMP-PNP.
- 20          4.     The crystal of claim 1 or 2, wherein the ligand is staurosporine.
5.     The crystal of claim 1 or 2, wherein the ligand is PP2.
6.     The crystal of claim 3 having space group of  $P2_12_12_1$  and a unit cell of  
25       dimensions of  $a = 42.1 \text{ \AA}$ ,  $b = 73.7 \text{ \AA}$ , and  $c = 91.7 \text{ \AA}$ .
7.     The crystal of claim 4 having space group of  $P2_12_12_1$  and a unit cell of dimensions of  $a = 42.2 \text{ \AA}$ ,  $b = 73.8 \text{ \AA}$ , and  $c = 91.4 \text{ \AA}$ .
- 30          8.     The crystal of claim 4 having space group of  $P2_12_12_1$  and a unit cell of dimensions of  $a = 61.5 \text{ \AA}$ ,  $b = 69.0 \text{ \AA}$ , and  $c = 73.7 \text{ \AA}$ .

9. The crystal of claim 5 having space group of  $P2_12_12_1$  and a unit cell of dimensions of  $a = 42.0 \text{ \AA}$ ,  $b = 73.7 \text{ \AA}$ , and  $c = 91.6 \text{ \AA}$ .

10. The crystal of claim 1 wherein the kinase has secondary structural  
5 elements that include five beta strands and one helix in the N-terminal lobe (strands 1, 2, 3, 4 and 5 and alpha helix C), and two beta strands and seven alpha helices in the C-terminal domain (strands 6 & 8, and alpha helices D, E, EF, F, G, H and I).

11. A method of using the crystal of claim 1 in a inhibitor screening assay  
10 comprising:

- (a) selecting a potential inhibitor by performing rational drug design with the three-dimensional structure determined for the crystal, wherein said selecting is performed in conjunction with computer modeling;
- (b) contacting the potential inhibitor with a kinase; and
- 15 (c) detecting the ability of the potential inhibitor for inhibiting the kinase.

12. The method of claim 11, wherein detecting the ability of the potential inhibitor for inhibiting the kinase in step (c) is performed using an enzyme inhibition assay.

20

13. The method of claim 11, wherein detecting the ability of the potential inhibitor for inhibiting the kinase in step (c) is performed using a cellular-based assay.

25 14. The method of claim 11 further comprising:

- (d) growing a supplemental crystal comprising a protein-ligand complex formed between the kinase and a first potential inhibitor from step (a), wherein the supplemental crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms;
- 30 (e) determining the three-dimensional structure of the supplemental crystal;

- (f) selecting a second potential inhibitor by performing rational drug design with the three-dimensional structure determined for the supplemental crystal, wherein said selecting is performed in conjunction with computer modeling;
- 5 (g) contacting the second potential inhibitor with a kinase; and
- (h) detecting the ability of the second potential inhibitor for inhibiting the kinase.
- 15 15. A method for identifying a potential inhibitor of a kinase comprising:
- 10 (a) selecting or designing a potential inhibitor by performing rational drug design with the three-dimensional structure coordinates of any of Tables 1-4, wherein said selecting is performed in conjunction with computer modeling;
- (b) contacting the potential inhibitor with a kinase; and
- 15 (c) detecting the ability of the potential inhibitor for inhibiting the kinase.
16. The method of claim 15, wherein detecting the ability of the potential inhibitor for inhibiting the kinase in step (c) is performed using an enzyme inhibition assay.
- 20 17. The method of claim 15, wherein detecting the ability of the potential inhibitor for inhibiting the kinase in step (c) is performed using a cellular-based assay.
- 25 18. The method of claim 15, wherein the potential inhibitor is designed *de novo*.
19. The method of claim 15, wherein the potential inhibitor is designed from a known inhibitor.
- 30 20. The method of claim 15 further comprising:

- (d) selecting an second potential inhibitor by performing rational drug design with the three-dimensional structure coordinates of any of Tables 1-4 and the potential inhibitor of step (a), wherein said selecting is performed in conjunction with computer modeling;
- 5 (e) contacting the potential inhibitor with a kinase; and
- (f) detecting the ability of the potential inhibitor for inhibiting the kinase.

21. A method of using truncated lck to grow a crystal of a protein-ligand complex comprising:

- 10 (c) contacting truncated lck with a ligand, wherein the truncated lck forms a protein-ligand complex with the ligand; and
- (d) growing the crystal of the protein-ligand complex; wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0
- 15 Angstroms.

22. The method of claim 21, wherein said growing is performed by hanging drop vapor diffusion.

- 20 23. The method of claim 21, wherein said ligand is PP2, staurosporine or AMP-PNP.

24. The method of claim 21, wherein said ligand is PP2.

- 25 25. A method of growing a crystal of a truncated lck-ligand complex wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms, comprising:

- (a) contacting a truncated lck solution with a ligand, wherein the
- 30 truncated lck forms a protein-ligand complex with the ligand; and
- (b) growing the crystal of the protein-ligand complex; wherein the crystal effectively diffracts X-rays for the determination of the atomic

coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms.

26. The method of claim 25, wherein the growing is performed by hanging  
5 drop vapor diffusion.

27. The method of claim 25, wherein the ligand is PP2, staurosporine or AMP-PNP.

10 28. A method of producing a crystal of a truncated lck-ligand complex wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms, comprising contacting a truncated lck crystal with a ligand, wherein the truncated lck forms a protein-ligand complex with the ligand within the crystal, and  
15 wherein the crystal effectively diffracts X-rays for the determination of the atomic coordinates of the protein-ligand complex to a resolution of greater than 5.0 Angstroms.

29. The method of claim 28, wherein the ligand is PP2, staurosporine or  
20 AMP-PNP.

30. A method of using the three-dimensional structure coordinates of any one of Tables 1-4, comprising:

- 25 (a) Determining structure factors from the coordinates; and  
(b) Applying said structure factor information to a set of X-ray diffraction data obtained from a crystal of a protein homologous to SEQ ID NO: 1;  
(c) Solving the three-dimensional structure of the protein homologous to SEQ ID NO: 1.

30

31. A computer readable data storage material encoded with computer readable data comprising structure coordinates of any one or more of Tables 1-4.

32. A computer readable data storage material encoded with computer readable data comprising structure coordinates of the active site of any one or more of Tables 1-4.

5

33. A method for identifying a potential inhibitor of a kinase comprising:  
(a) selecting or designing a potential inhibitor by performing rational drug design with a computer readable data storage material encoded with computer readable data comprising structure coordinates of any one or more of Tables 1-4, wherein said selecting is performed in conjunction with computer modeling;  
(b) contacting the potential inhibitor with a kinase; and  
(c) detecting the ability of the potential inhibitor for inhibiting the kinase.

10

34. The method of claim 33, wherein the computer readable data storage material is encoded with computer readable data comprising structure coordinates of the active site of any one or more of Tables 1-4.

15

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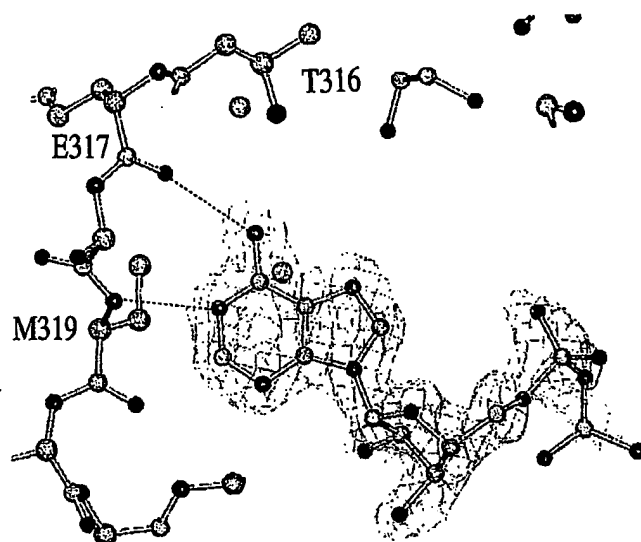


FIG. 1A

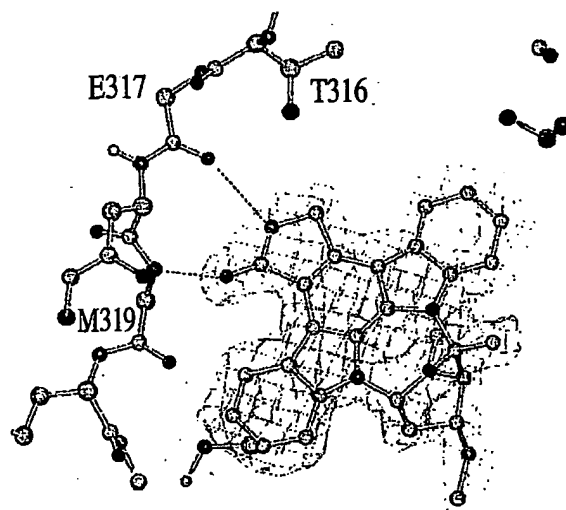


FIG. 1B



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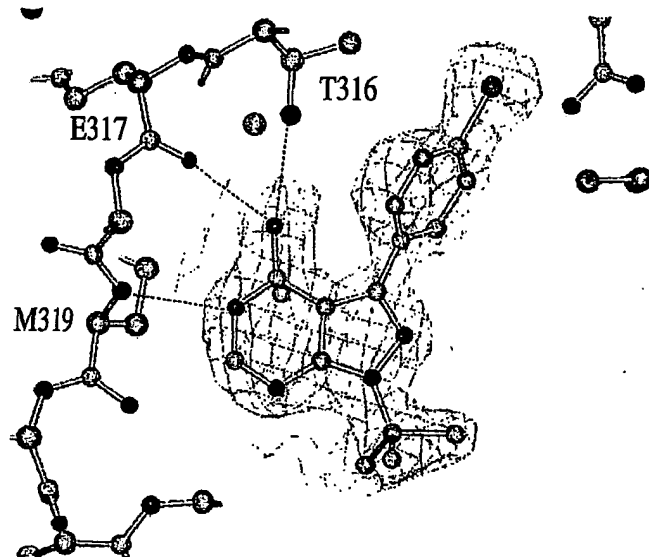


FIG. 1C

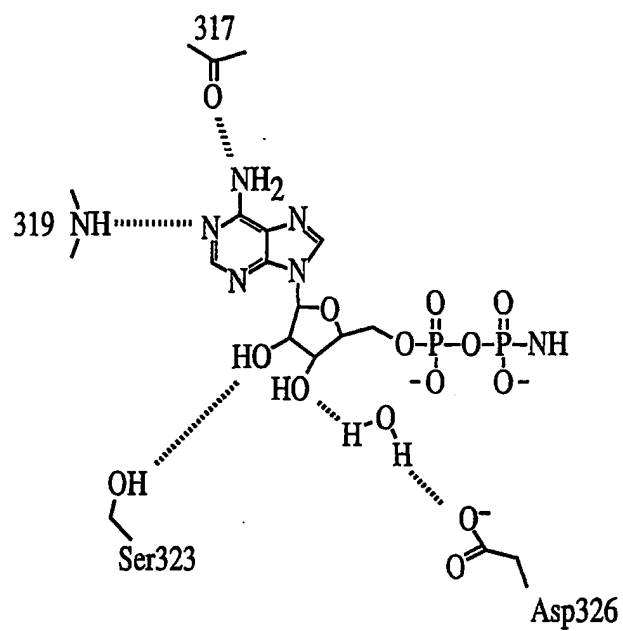


FIG. 2A

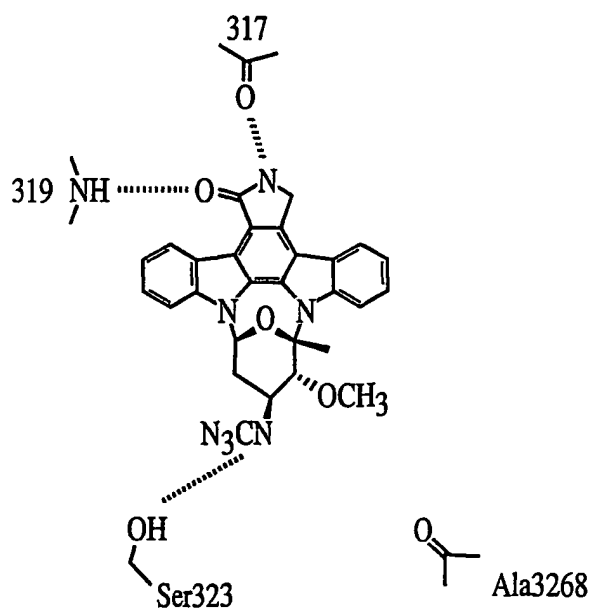


FIG. 2B

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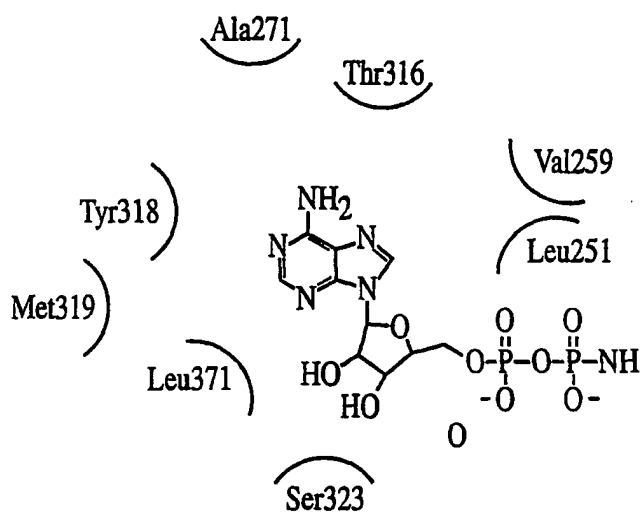


FIG. 2C

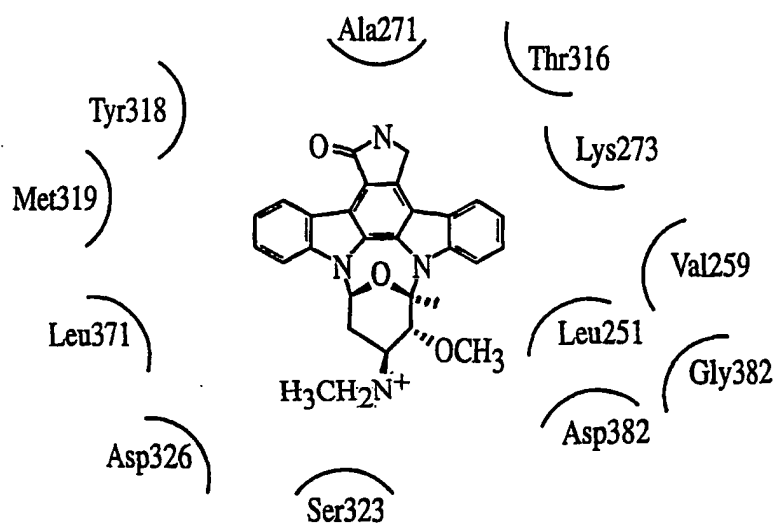


FIG. 2D

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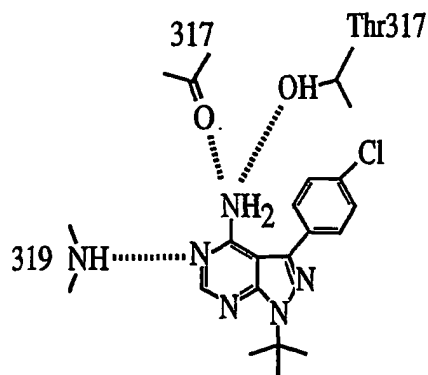


FIG. 2E

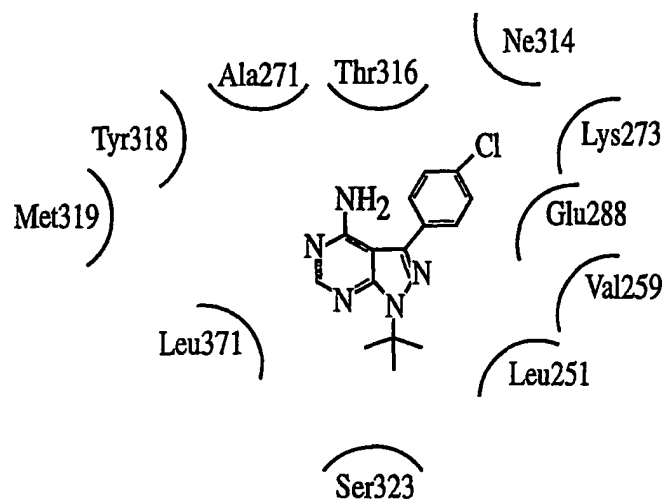


FIG. 2F

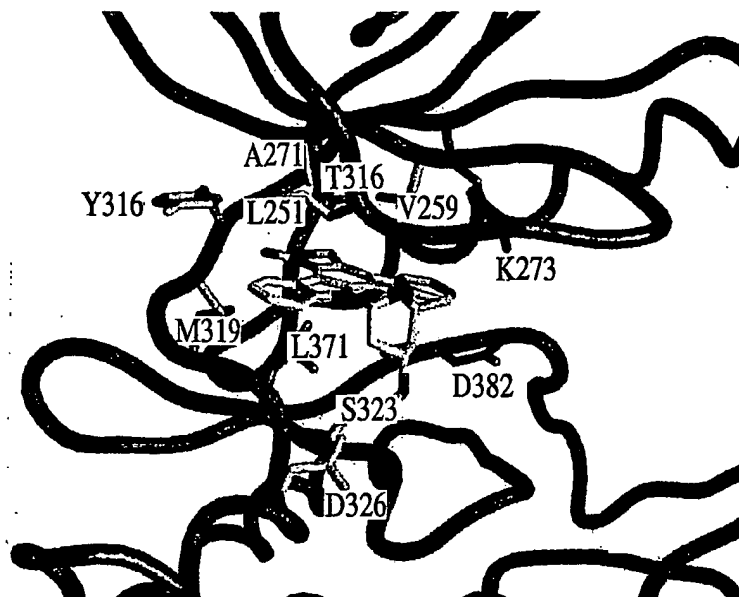


FIG. 3A

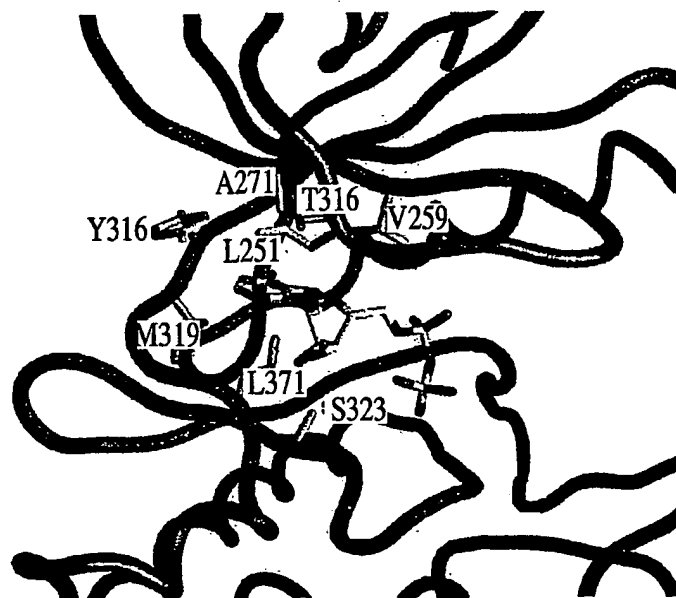


FIG. 3B

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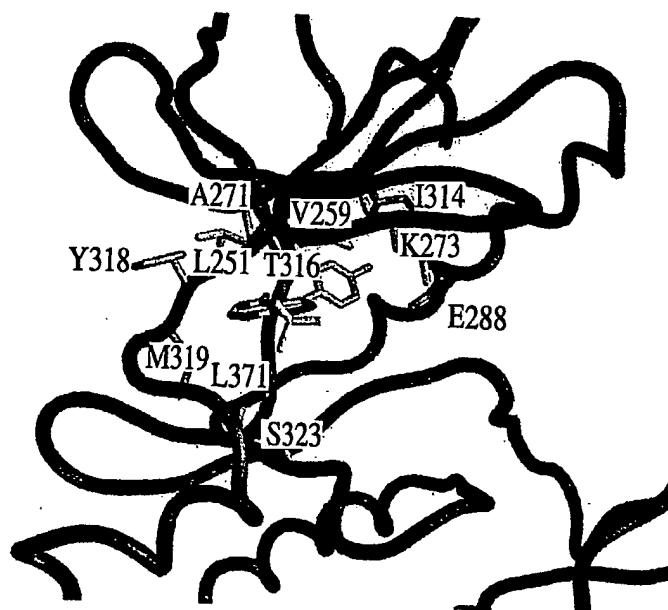


FIG. 3C

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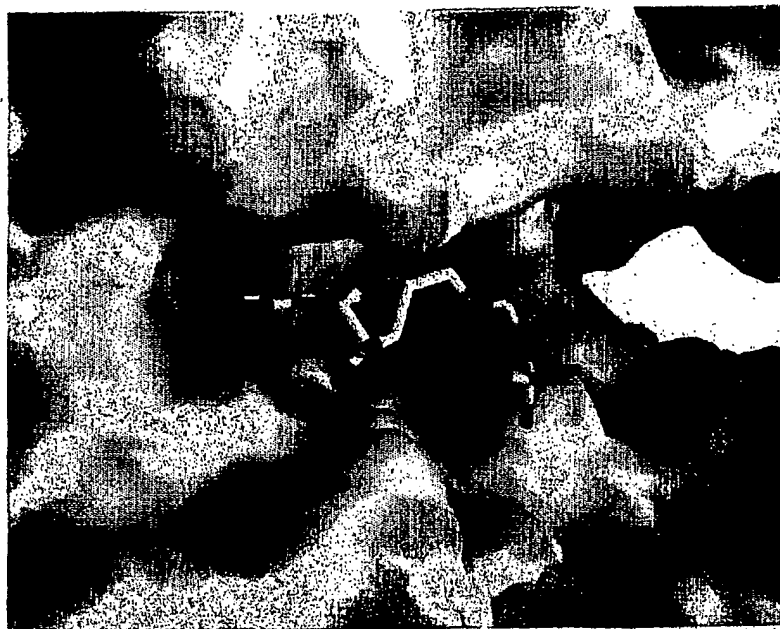


FIG. 3D



FIG. 3E

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FIG. 3F



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FIG. 4

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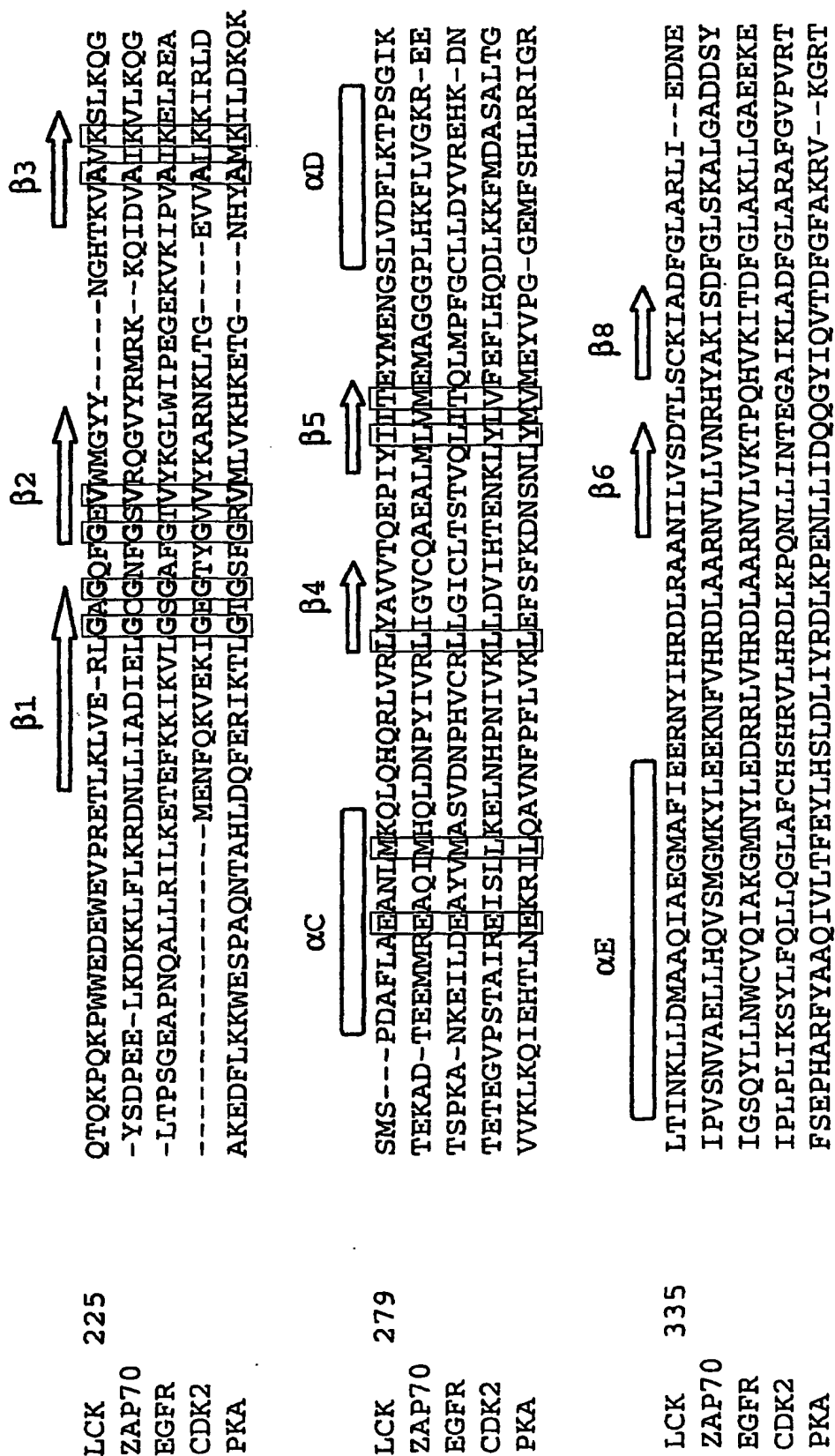


FIG. 5A

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LCK 394  
 ZAP70  
 EGFR  
 CDK2  
 PKA

αEF [ ] αF [ ] αG [ ]  
 YTAREGAKFPKWTAPeAInYGTFT-IKSDVMSFGILLTEIVTHGRI-PYPGMTNPEVIQ  
 YTARSAGKWPLKWYAPeCInFRKFS-SRSDVMSYGVTMWEALSYGQK-PYKKMKGPPEVMA  
 YHAE-GGKVPiKWMALeSILHRIYT-HQSDVMSYGVTVWELMTFGSK-PYDGIPASEISS  
 YTHE---VVTlWYRAPEILLGCKYYSTAVDlMSLGCIFAEMVTRRALFPGDSEIDQLFRI  
 WTLC-----GTPEYLAPeIIlSKGYNK-AVDWlALGVLIYEMAAGYPP--FFADQPIQIYE

LCK 451  
 ZAP70  
 EGFR  
 CDK2  
 PKA

αH [ ] αI [ ]  
 NLERG--YRMVRPDNCPEELYQlMRlCWKER--PEDRPTFDYlRSVLEdFFT-----  
 FIEQg---KRMECPPECPPELYAlMSDdCWlYK--WEDRPdFLTVEQRMRAcYy-----  
 ILEKg---ERLPQPPiCTIDVYMiMVKcWMIID-ADSRPKFRELIIEFSKMARDPQR---YL  
 FRtlGTPDeVvWPGVtSMpDYKPSFPKWARQDFSKVVPPLDEdGRSllSQMLHYDpNKRI  
 KIVSG---KVRFPESHFSsDLKDLRLNllQVD-LTKRFGNLKNGVN-DIKNHKWFAATTDWI

LCK 500  
 ZAP70  
 EGFR  
 CDK2  
 PKA

ATEG--QYQ-PQP-----  
 SLAS--KVEGP-PGSTQKAeAACA-----  
 VIQGDermHlPSPTDSNFYRALMDEEDMDdVDADEYlIPQQGFSSPSTSRTPllSSLS  
 SAKA--ALAHpFFQDVTKPVPHLRl-----  
 AIYQR-KVEAPFiPKFKGPGDTSNFDDYEEEEIRVSINEKCGKEFSEF-----

FIG. 5B

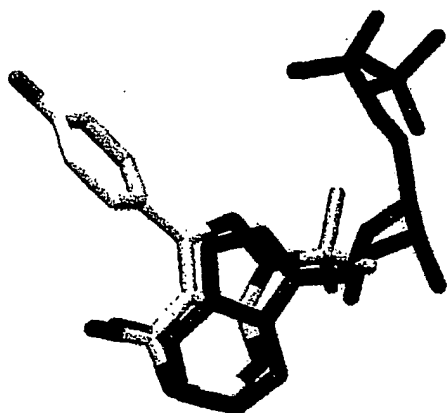


FIG. 6B

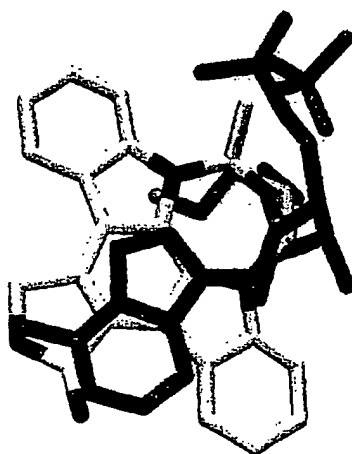


FIG. 6A

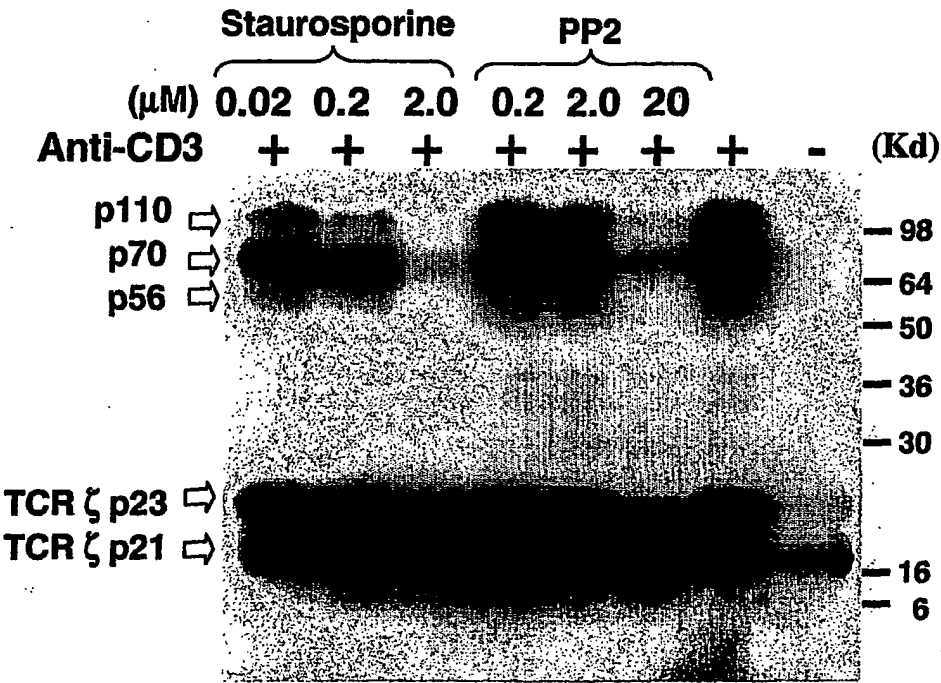


FIG. 7

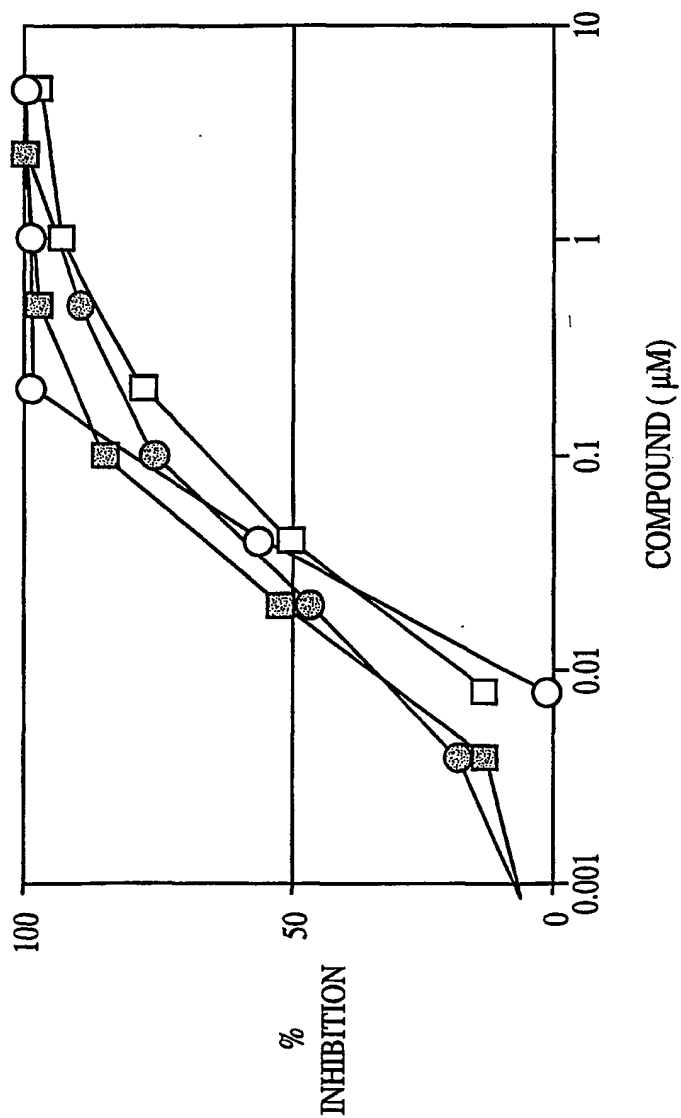


FIG. 7A

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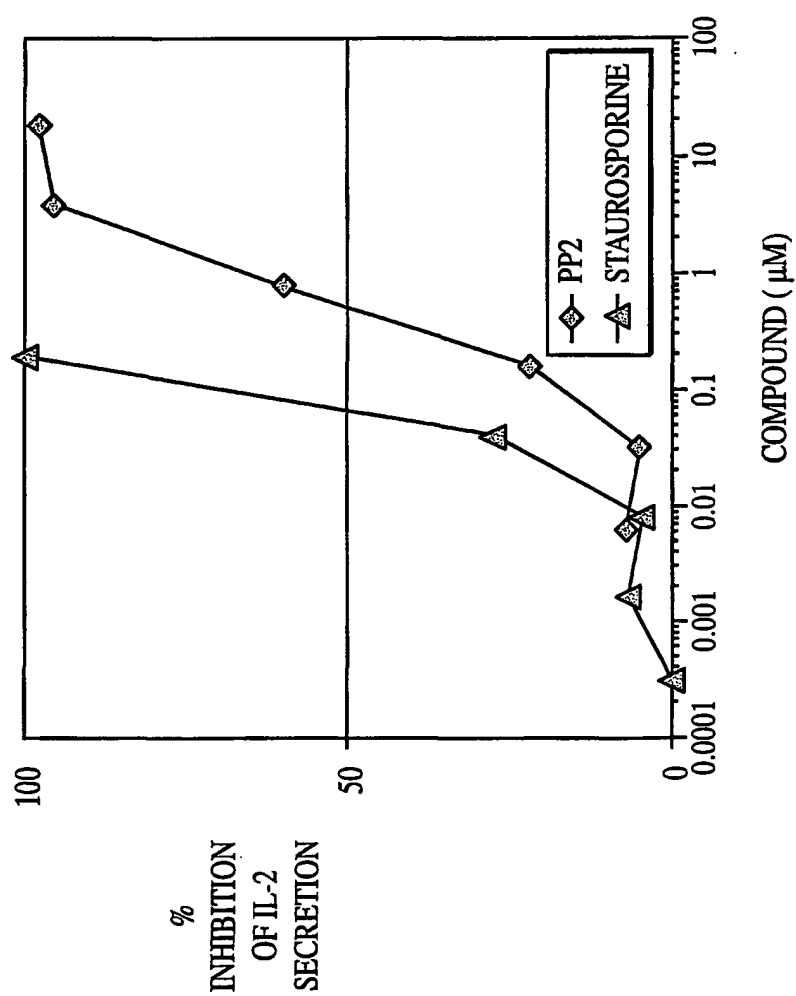


FIG. 7B

## SEQUENCE LISTING

<110> Zhu, Xiaotian  
 <120> Crystal of a Kinase-Ligand Complex and Methods of Use  
 <130> Atty. Docket No.: 11345-005W01  
 <140> Not Yet Assigned  
 <141> 2000-05-19  
 <160> 1  
 <170> PatentIn Ver. 2.0  
 <210> 1  
 <211> 508  
 <212> PRT  
 <213> Homo sapiens  
 <400> 1

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Asp	Val	Cys	Glu	Asn	Cys	His	Tyr	Pro	Ile	Val	Pro	Leu	Asp	Gly	Lys	20	25	30	
Gly	Thr	Leu	Leu	Ile	Arg	Asn	Gly	Ser	Glu	Val	Arg	Asp	Pro	Leu	Val	35	40	45	
Thr	Tyr	Glu	Gly	Ser	Asn	Pro	Pro	Ala	Ser	Pro	Leu	Gln	Asp	Asn	Leu	50	55	60	
Val	Ile	Ala	Leu	His	Ser	Tyr	Glu	Pro	Ser	His	Asp	Gly	Asp	Leu	Gly	65	70	75	80
Phe	Glu	Lys	Gly	Glu	Gln	Leu	Arg	Ile	Leu	Glu	Gln	Ser	Gly	Glu	Trp	85	90	95	
Trp	Lys	Ala	Gln	Ser	Leu	Thr	Thr	Gly	Gln	Glu	Gly	Phe	Ile	Pro	Phe	100	105	110	
Asn	Phe	Val	Ala	Lys	Ala	Asn	Ser	Leu	Glu	Pro	Glu	Pro	Trp	Phe	Phe	115	120	125	
Lys	Asn	Leu	Ser	Arg	Lys	Asp	Ala	Glu	Arg	Gln	Leu	Leu	Ala	Pro	Gly	130	135	140	
Asn	Thr	His	Gly	Ser	Phe	Leu	Ile	Arg	Glu	Ser	Glu	Ser	Thr	Ala	Gly	145	150	155	160
Ser	Phe	Ser	Leu	Ser	Val	Arg	Asp	Phe	Asp	Gln	Asn	Gln	Gly	Glu	Val	165	170	175	
Val	Lys	His	Tyr	Lys	Ile	Arg	Asn	Leu	Asp	Asn	Gly	Gly	Phe	Tyr	Ile	180	185	190	
Ser	Pro	Arg	Ile	Thr	Phe	Pro	Gly	Leu	His	Glu	Leu	Val	Arg	His	Tyr	195	200	205	
Thr	Asn	Ala	Ser	Asp	Gly	Leu	Cys	Thr	Arg	Leu	Ser	Arg	Pro	Cys	Gln	210	215	220	



Thr Gln Lys Pro Gln Lys Pro Trp Trp Glu Asp Glu Trp Glu Val Pro  
 225 230 235 240  
 Arg Glu Thr Leu Lys Leu Val Glu Arg Leu Gly Ala Gly Gln Phe Gly  
 245 250 255  
 Glu Val Trp Met Gly Tyr Tyr Asn Gly His Thr Lys Val Ala Val Lys  
 260 265 270  
 Ser Leu Lys Gln Gly Ser Met Ser Pro Asp Ala Phe Leu Ala Glu Ala  
 275 280 285  
 Asn Leu Met Lys Gln Leu Gln His Gln Arg Leu Val Arg Leu Tyr Ala  
 290 295 300  
 Val Val Thr Gln Glu Pro Ile Tyr Ile Ile Thr Glu Tyr Met Glu Asn  
 305 310 315 320  
 Gly Ser Leu Val Asp Phe Leu Lys Thr Pro Ser Gly Ile Lys Leu Thr  
 325 330 335  
 Ile Asn Lys Leu Leu Asp Met Ala Ala Gln Ile Ala Glu Gly Met Ala  
 340 345 350  
 Phe Ile Glu Glu Arg Asn Tyr Ile His Arg Asp Leu Arg Ala Ala Asn  
 355 360 365  
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 370 375 380  
 Ala Arg Leu Ile Glu Asp Asn Glu Tyr Thr Ala Arg Glu Gly Ala Lys  
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 Thr Ile Lys Ser Asp Val Trp Ser Phe Gly Ile Leu Leu Thr Glu Ile  
 420 425 430  
 Val Thr His Gly Arg Ile Pro Tyr Pro Gly Met Thr Asn Pro Glu Val  
 435 440 445  
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 450 455 460  
 Pro Glu Glu Leu Tyr Gln Leu Met Arg Leu Cys Trp Lys Glu Arg Pro  
 465 470 475 480  
 Glu Asp Arg Pro Thr Phe Asp Tyr Leu Arg Ser Val Leu Glu Asp Phe  
 485 490 495  
 Phe Thr Ala Thr Glu Gly Gln Tyr Gln Pro Gln Pro  
 500 505

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/13881

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N9/12 C12Q1/42

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

BIOSIS, EPO-Internal, WPI Data, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	YAMAGUCHI HIROTO ET AL: "Structural basis for activation of human lymphocyte kinase Lck upon tyrosine phosphorylation." NATURE (LONDON), vol. 384, no. 6608, 1996, pages 484-489, XP002147350 ISSN: 0028-0836 cited in the application the whole document	1-34
Y	WO 98 07835 A (SCHLESSINGER JOSEPH ; LIANG CONGXIN (US); SUGEN INC (US); TANG PENG) 26 February 1998 (1998-02-26) the whole document --- -/--	1-34

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

20 September 2000

Date of mailing of the international search report

04/10/2000

Name and mailing address of the ISA

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Authorized officer

Van der Schaal, C.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/13881

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JOHNSON LOUISE N ET AL: "The structural basis for substrate recognition and control by protein kinases." FEBS LETTERS, vol. 430, no. 1-2, 23 June 1998 (1998-06-23), pages 1-11, XP002147351 ISSN: 0014-5793 the whole document	1-34
P,X	ZHU XIAOTIAN ET AL: "Structural analysis of the lymphocyte-specific kinase Lck in complex with non-selective and Src family selective kinase inhibitors." STRUCTURE (LONDON), vol. 7, no. 6, June 1999 (1999-06), pages 651-661, XP000946108 ISSN: 0969-2126 the whole document	1-34

INTERNATIONAL SEARCH REPORT  
Information on patent family members

International Application No

PCT/US 00/13881

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9807835 A	26-02-1998	US 5942428 A	24-08-1999
		AU 4160397 A	06-03-1998
		EP 0931152 A	28-07-1999
<hr/>			